In the Name of Allah
The Most Compassionate, The Most Merciful

Patient at Heart, Science in Hand
Table of Contents

Message from the Chancellor 6
Hippocrates said 7
The Organizational Mission Statement 8
SEMUMS International Strategies 9
General Information 12
A Short History of Medicine in Iran
About SEMUMS

Islamic Republic of IRAN 14
History
Geography and Nature
Climate
Population
Language
Religion
Culture
Flora and Fauna
Economy
Administrative Divisions

About Semnan 22
Geography
Climate
Historical Sites and Places of Interest
Historical Innovations
Economy
Industrial Sector
Agricultural Sector
Unique Food and Dishes

Vice-Chancellors 30
Vice-Chancellor for Education
Vice-Chancellor for Research and Technology
Vice-Chancellor for Students and Cultural Affairs
Vice-Chancellor for Treatment
Vice-Chancellor for Management and Resource Development
Vice-Chancellor for Health
Vice-Chancellor for Drug and Food
<table>
<thead>
<tr>
<th>Schools</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>School of Medicine</td>
<td></td>
</tr>
<tr>
<td>School of Dentistry</td>
<td></td>
</tr>
<tr>
<td>School of Rehabilitation</td>
<td></td>
</tr>
<tr>
<td>School of Nursing and Midwifery</td>
<td></td>
</tr>
<tr>
<td>School of Health</td>
<td></td>
</tr>
<tr>
<td>School of Allied Medical Sciences</td>
<td></td>
</tr>
<tr>
<td>School of Nutrition, Food Sciences and Allied Medical Sciences</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Research Centers</th>
<th>80</th>
</tr>
</thead>
<tbody>
<tr>
<td>Neuromuscular Rehabilitation Research Center</td>
<td></td>
</tr>
<tr>
<td>Physiology Research Center</td>
<td></td>
</tr>
<tr>
<td>Stem Cells in the Nervous System Research Center</td>
<td></td>
</tr>
<tr>
<td>Abnormal Uterine Bleeding Research Center</td>
<td></td>
</tr>
<tr>
<td>Social Determinants of Health Research Center</td>
<td></td>
</tr>
<tr>
<td>Nursing Care Research Center</td>
<td></td>
</tr>
<tr>
<td>Cancer Research Center</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Hospitals</th>
<th>94</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kowsar Hospital</td>
<td></td>
</tr>
<tr>
<td>Amiralmomenin Hospital</td>
<td></td>
</tr>
<tr>
<td>Motamedi Hospital</td>
<td></td>
</tr>
<tr>
<td>Velayat Hospital</td>
<td></td>
</tr>
<tr>
<td>Imam Hossein Hospital</td>
<td></td>
</tr>
<tr>
<td>Panzdah-e-Khordad Hospital</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Welfare Facilities</th>
<th>100</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housing</td>
<td></td>
</tr>
<tr>
<td>Food Services</td>
<td></td>
</tr>
<tr>
<td>Physical Education</td>
<td></td>
</tr>
<tr>
<td>Cultural Activities</td>
<td></td>
</tr>
<tr>
<td>Physical and Mental Health</td>
<td></td>
</tr>
</tbody>
</table>
Project Team (International Relations Office)

Project Manager: Dr. Manouchehr Safari (Director of International Relations)

Editorial Staff: Dr. Manouchehr Safari, Dr. Omid Amani, Mohammadreza Ghaffari, and Rahimeh Omrani

Translated by: Mohammadreza Ghaffari, Dr. Omid Amani

Photography: Mohammadreza Cheloiyan
Message from the Chancellor

It is my pleasure to welcome you to Semnan University of Medical Sciences (SEMUMS). As medical education in Iran has a long history, thus Iran has always been a home for medical researchers and physicians such as Avicenna and Zakariya Razi; and also the numerous scholars have followed their medical views in medicine throughout the history.

Our objective is to become an internationally recognized university to attract the students and researchers around the world. And our commitment is to develop the education in medical sciences through our ever-expanding interactions with researchers and overseas students in the international academic landscapes.

Our mission is to educate students at all levels and disciplines of the medical sciences in accordance with the highest educational standards. SEMUMS is going to educate future medical physicians, dentists, and health researchers to work in diverse communities. Our aim is to create a globally recognized community that attempts to achieve the highest levels of expertise in medical fields internationally.

Now SEMUMS is going to expand the international links to recruit overseas students and researchers from across the world. I wish you success in your academic endeavors.

Navid Danaie (MD)
Chancellor
HIPPOCRATES SAID

“Medical Students ought…
To be golden-hearted,
To have a true understanding, a sweet talk, and diction
To be not obsessed with money and wealth…
To be self-restrained when furious,
To be kind to the ill,
To respect privacy and confidentiality,
To wear white coats,
To have a mild demeanor and gentle talk…”
The Organizational Mission Statement

Attitudes and Values

As Imam Khomeini (PBH) put it, “All changes are originated from universities, and decide the destiny of a nation”. The ultimate goal is the satisfaction and the lasting multidimensional progress of the society. To fulfill this wish, SEMUMS finds itself committed to the people, the patients, the students, the staff, the faculty, other medical universities, the Ministry of Health, Treatment and Medical Education, and the Supreme Council of Cultural Revolution under the following principles. Firstly, we have faith in the Islamic culture, spirituality, and observance of the moral principles, and we do our best to meet the needs of the staff and patients to provide for their spiritual growth. Secondly, we have faith in the sublime status of the faculty, the students, the staff, and all walks of life and their satisfaction is the initial step for satisfaction of the whole society. Thirdly, we value our human resources as the most precious asset, and provide for their participation, innovation, and group work. We also try to establish open and bilateral relationships, and a system for rule of meritocracy. Fourthly, we are concerned with applying scientific methods to problem solving, managing affairs, strict planning, and using the fruitful experiences. We believe that individuals should not be blamed for the problems and shortcomings; on the contrary, we should seek to adopt well-planned scientific and systematic measures to solve the problems. Last but not least, as a public institution, we feel greatly committed in achieving the best results, enhancing productivity at the lowest possible cost, and protecting the environment.

Mission

As a member of the national health system and in accordance with the general policies made by the Ministry of Health and Medical Education, SEMUMS renders services to the population covered and is active in the following areas:

1) Rendering educational services within the scope of health sciences to extend the university’s expertise to the community locally, nationally, and internationally in order to support health promotion, health protection, and the advancement of the health sciences proportion. This is done to serve community by the dissemination of knowledge through teaching and the discovery of knowledge through research, to emphasize offering specialized and sub-specialized courses, and PhD programs to train manpower needed by other medical universities and health care and research centers.

2) Introducing health care oriented sciences and technology through conducting fundamental, applied and developmental researches to solve the health care problems at regional and national levels, acquiring the technology to produce the strategic medical and drug supplies to meet local needs and boost exports, designing and promoting new software, and educational methods appropriate for the needs of the society, providing for joint efforts with other organizations, institutions, and universities to identify and meet the mutual needs, and render scientific and specialized services, developing appropriate structural and managerial models and procedures within the national health system, participating in publication of renowned scientific resources and contributing to produce science at the national and international levels.

3) Rendering health care services at all levels to the covered population, in the specialized hospitals to the public, in the areas which comply with the national comprehensive health care policies in which the private sector is not inclined to invest.

4) Supervising and inspecting health care centers and authorizing the issuance of license on health care services in the covered area on behalf of the concerned ministry.
Vision

The gist of the vision of SEMUMS is summarized as accomplishing the followings in the coming decade:

• Promoting the university's academic status at the regional as well as the international level through acquiring the required capabilities in rendering higher educational services than those of the countries in the region,
• Increasing the university's role in producing the science, research work, and publication of scientific articles in the international journals, and meeting the health needs of the society,
• Obtaining the required technology to produce the strategic medical supplies for the needs of the society, improving the health standards of the covered population, and enhancing the quality and the diversity of the sub-specialized health care services, and finally,
• Playing effective roles in introducing new methods and comprehensive plans for environmental preservation.

SEMUMS International Strategies

Semnan University of Medical Sciences, as one of the most prestigious universities in Iran, clearly recognizes and comprehends the significance of stepping into international arenas of higher education. Here in SEMUMS, we firmly believe that our performance, educational services, and goals can no longer be measured by most local criteria, and it is for this reason that we have entered the international landscape of higher education. In line with this mindset, SEMUMS Office of International Affairs has designed several frameworks and various strategies to effectively develop international aspects of SEMUMS.

One of the major dimensions of internationalization strategies of SEMUMS focuses on local and international potential aspects of development. Such aspects include, but are not limited to, faculty/staff training, providing infrastructural requirements, student services, etc. The fulfillment of these needs makes SEMUMS an effective and resourceful educational organization on its home turf.

Another strand in the internationalization of this university, which might carry more value and importance than the former, consists of numerous activities related to international and cross-border interactions. These practices consist of student/faculty mobility, joint educational services with other universities and institutes of higher education, cooperation in shared research ventures, and much more. Such interactions, which are always in some sort of cooperation with other international educational entities, serve as the basis from which we can create and enhance the international identity of SEMUMS.

Semnan University of Medical Sciences has, for quite a while now, embarked upon an adventurous journey towards becoming a renowned international university. In due time, we approach, take up, and tackle any and all challenges with care and accuracy. Until now, we have witnessed significant improvements and advances with regard to international development, and we sincerely hope that we will be able to carry on with this trend in the future we have ahead of us.
Our recent International Cooperation:

Osh state University (Kyrgyzstan)

Kyrgyz-Russian Slavic University (Kyrgyzstan)
I. K. Akhunbaev Kyrgyz State Medical Academy (Kyrgyzstan)
General Information

A Short History of Medicine in Iran

Medicine in Iran dates back to about the dawn of civilization. The ancient Iranian medicine has inseparable ties with Zoroastrianism mentioned in Avesta. According to some ancient Iranian myths, practicing medicine can be traced back to the era of Jamshid, the fourth mythical king of Iran and the oldest evidence of surgery demonstrates the trephination of a 13-year-old hydrocephalous girl performed 4850 years ago. Medicine in pre-Islamic era reached its zenith when the University of Jondishapoor was founded by the Sassanid Monarch; Shapoor I.

Jondishapoor remained as one of the most important universities of the ancient civilized world for several centuries and attracted many scientists from all over the world especially from Greece, Rome, etc. Later, Anooshirvan, the Sassanid Monarch, commanded the formation of the first academy of sciences by gathering all the famous physicians of the time, the university contributed a lot to the progress of medicine in Western Europe around the seventh and eighth centuries. Upon the rise of Islam and its expansion, Arabic became the official language of the Muslim World and Iranian Muslim scientists and physicians wrote their great works in that language. Writings of great Iranian physicians in the ninth and tenth centuries were the dominant works in the field of medicine in the world for many years.

The tenth and eleventh centuries witnessed the blooming of two great Iranian learned men - Avicenna and Biruni - who are considered as turning points in the evolution of medicine in Iran, and in the other parts of the world as well. Modern medicine flourished under the Qajar Dynasty after a great man called Amir Kabir established Dar-ol-Fonoon School in 1851 in which medicine, pharmacology, mathematics, literature, fine arts, and many others were taught. Through employing foreign teachers, and sending a number of students abroad in 1858, the School came to play a key role in the development and education of modern medicine.

About SEMUMS

Semnan University of Medical Sciences (SEMUMS), affiliated to the Ministry of Health, Treatment and Medical Education, is one of the medical universities located in the east of Iran. It is a state medical university located in Semnan, being founded in 1989. It has always been actively involved not only in academic activities, but also in research, health and treatment. This university offers a wide range of opportunities and excellent facilities for study and research in medical fields and is a nationally recognized high-profile institution that provides a superior education, research and treatment services to the community.

SEMUMS is the home campus for state wide programs in such medical fields as Medicine, Dentistry, Health, Nursing, Allied medicine and Rehabilitation majors. As one of the outstanding medical research universities in Iran, SEMUMS also tries to encourage researchers and facilitate their needs in order to attain its research and academic goals. The university tries to fulfill its three important missions, namely Research, Education and Healthcare.
Islamic Republic of IRAN

History

The plateau of Iran is among the oldest civilization centers in the history of humanity and has an important place in archaeological studies. The history of settlement in the Plateau of Iran, from the new Stone Age till the migration of Aryans to this region, is not yet very clear. But there is reliable evidence indicating that Iran has been inhabited since a very long time ago. According to archaeological excavations conducted in these civilization centers, some vestiges have been discovered, the antiquity of which date back to the 5th millennium BC. The migration of Aryan Tribes to the Plateau of Iran began in the 2nd millennium BC. Out of these tribes, the Parthians dwelled in Khorasan, the Medes in the west, and the Parsees resided in southern Iran. The Median Empire rose in Hegmataneh (Ekbatan). The Achaemenids established the first great Persian Empire after defeating the Medes and conquering of their capital. The limits of the Achaemenian territory during the reign of Dariush I (522-485 BC) extended from the plain of Sand River in the east to the borders of Greece in the west. After the decline of the Achaemenian dynasty, succeeding Seleucids, dominated Iran for a short period of time. During this time, the interaction between Iranian and Hellenic cultures occurred.
Around the year 250 BC, the Parthians, who were an Aryan tribe as well as horse riders, advanced from Khorasan towards the west and south-west and founded their empire on Iran Plateau choosing Teesfoon as their capital. This empire survived only until the year 224 AD. The Sassanides, after defeating the last Parthian King in 225 AD, founded a new empire which lasted until mid 7th century AD. The influence of Islam in Iran began in the early 7th century AD after the decline of the Sassanid Empire.

From that time, a new era began in the history of Iran which caused fundamental changes in social, political, religious, governmental, and general conditions of the country. Iranians, who were very unhappy with the existing social and economic inequalities in the time of the Sassanides, welcomed the just and sublime religion of Islam with pleasure and contributed to its expansion and enrichment.

After that, different local governments were appointed by Islamic Central Government. But due to differences among the local governments, the Iranian government became weak and declined. In the Safavid time (1501-1732), the second great Iranian Empire was founded and the Shiite sect of Islam, disciples of which were seriously limited till then, was formalized. The dynamic nature of Shiism and its political and social commitments firmly safeguarded Iranian independence and national identity against Ottoman assaults. Thus, Iran once again became a new political and religious power.
With the decline of the Safavid, Afsharieh and later the Zandieh took the throne. After the Zandieh rule, the Qajars took power. At this time, the influence of foreign powers such as Britain and Russia in the internal affairs of Iran significantly increased. In the Pahlavi period, despite the regime’s oppositions, Oil Industry Nationalization Movement succeeded. Some years later in 1963, a popular uprising started against the regime which finally led to the victory of the Islamic Revolution in 1979. The government of Iran is “Islamic Republic” which was founded after the Islamic Revolution. The founder of the Republic and the leader of the Revolution was Imam Khomeini, who passed away in July 1989 and the Assembly of the Experts elected Ayatollah Seyed Ali Khamene’i as the Leader of the Islamic Republic of Iran.

Geography and Nature

Covering an area of 1,648,195 square kilometres, Iran is located in south western Asia. The Caspian Sea, Turkmenistan, Azerbaijan, and Armenia on the north; Afghanistan and Pakistan on the east; and Turkey and Iraq on the west surround the country.

Iran is one of the five littoral states of the Caspian Sea. On the south, Iran shares borders with the littoral states of the Persian Gulf and the Gulf of Oman. Total terrestrial borders of the country are 5,170 km and total water borders are 2,510 km. Iran is situated at the heart of the Middle East and bridges Caspian Sea, the largest landlocked body of water in the world, to the Persian Gulf. It is also a crossroad between the East and the West. Thus, historically, Iran has been in the juncture of cultural, intellectual and political manifestations of both the East and the West, while preserving its unique identity.

Unique landscapes such as limpid water springs, pomegranate orchards, pistachio gardens, rows of Lombardy poplars, decampment of nomads in different seasons, rocky mountains, endless high and low lands, extinct snow-clad volcanoes, dense forests of the Alborz Mountain Range, and coastlines of the Caspian sea, the Persian Gulf and the Gulf of Oman are all eye-catching and memorable.

Iran’s landscapes vary remarkably through different seasons. Iranian artists have portrayed Iran’s nature as a sign of diversity and charm in their different and diverse artistic works. Nature and its diversity in Iran are valuable parameters for development of the tourism industry. Among significant characteristics of the vast land of Iran are the existence of high mountains as well as flat plains, desert areas, rivers, and lakes contributing to unique geographical conditions in which, at any time of the year, and in each section of the country, one of the four seasons is visible.
Climate

Iran is situated in the global arid zone and the Plateau of Iran suffers from a relatively dry climate. Alborz and Zagros mountain chains trap the humidity and air currents of the Caspian Sea and the Mediterranean climate preventing them from penetration into the inner parts. Due to its location between 25 and 40 degrees latitude as well as its mountains, Iran enjoys considerably variable climates. The average annual temperature increases from the north-west to the southeast throughout the country and varies from 10°C in Azarbaiejan to 25-30°C in the south and southeast in the same season. The northern and southern shores of Iran have diverse climatic conditions compared with the central and mountainous regions.

The best season for travelling to Iran is spring. However, in every season there are provinces which are more favourable than others from a climatic point of view.
Population
With a total population of 67,000,000 (2001), Iran is the 17th populous country in the world with an average density of 37.8 per Km². In the 1996 census, 64.7% of the total population was urban. The capital Tehran by itself claimed no less than 10.87% of the country’s population.

Language
The official language spoken in Iran is Persian or Farsi. In addition, there are some other languages such as Turkish, Arabic, and Kurdish spoken in various parts of the country. The only script in use is Farsi script.
Religion

Iran is the birthplace of Zoroaster, the founder of the Zoroastrian religion, one of the oldest religions of the world. The official religion of Iran, based on Article 12 of the Constitution, is Islam (Shiite), and about 99.56% of the people of the country are Muslim. Disciples of other branches of Islam such as Hanafi, Maleki, Shafei, Hanbali, and Zaidi in Iran are highly respected and live freely without any limitations. In the Constitution of the Islamic Republic of Iran, religions such as Zoroastrians, Christians, and Judaïsms are officially recognized and their disciples have equal political, social and economical rights as Muslims. Religious minorities of Zoroastrian, Armenians, Jews, Assyrians, and Chaldeans have their own independent representatives in the Islamic Consultative Assembly (Parliament).
Culture

Cultural richness of Iran in different areas like different eastern art, literature and Gnosticism has global reputation. Iranian myths, fictions, philosophy, poetry, music, folklore, handicrafts, architecture, and fine arts are important parts of human thoughts.

Flora and Fauna

Of the total land area of Iran some 180,200 Km² is forested. The most extensive forest growth is to be found on the northern plains of the mountain slopes that face the Caspian Sea, where stands of oak, ash, elm, cypress, pine and other valuable trees grow abundantly. Outside this belt of rich forest, scattered forests of oak and wild pistachios are to be found on the well watered slopes particularly along the Zagros Mountains. The interior of the country is characterized by spring pastures on the higher levels and scanty short-lived shrubs on the lower. Most of the interior deserts are absolutely desolate without any sign of vegetation and life during most of the hot and long summers. Bears in the mountains, wild sheep and goats, gazelles, wild asses, wild pigs, wild cats and occasionally panthers and foxes together with a variety of pheasants, partridges, stork and falcons, are among the native animals and birds of Iran. A variety of wonderful and rare marine life such as shrimps and sturgeons can be found in Iranian sea waters in abundance.
Economy

According to the Article 44 of the Constitution of the Islamic Republic, the economy of Iran is managed by three sectors: private, state, and cooperative. Presently, only 2.5% of the country’s economy is owned by cooperatives; the most predominant monopolisers of the economy are the state and private sector. In the last four decades, the main source of income of the country has been oil and gas exports.

In spite of severe fluctuations in the global oil price, the oil export still plays a very important role in the economy of the country and is the main source of income in foreign currency. The Gross Domestic Product (GDP) is the total of revenues from agriculture, industry and mines, services, and oil. Iran enjoys a variety of mineral resources. Huge deposits of iron ore, copper, coal, cobalt, chrome and other metals emphasize this fact. Based on the statistics released by Iranian Statistical Center the total mineral reserves of the country amounted to 4855 million tons in 1998.

Since a long time ago, agriculture has played a major role in Iran’s economy and development. This important sector, responsible for providing the food supply of the country, has employed about one third of the total employed population. Today, agriculture sector plays a very important role in the foreign exchange balance of the country for securing GNP and non-oil exports. Some of the most important agricultural products of Iran include crops, legumes, fruits, nuts, spices, tea, grains, vegetables, honey, and dairies. Caviar and shrimps are famous sea food exports of Iran. The unit of Iranian currency is Rials, internationally abbreviated into RIs. Coins in denominations of 50, 100, and 250 Rials and bank notes in denominations of 100, 200, 500, 1000, 2000, 5000, 10000, and 20000 as well as 50000 Rials are available. The exchange rate with other currencies varies and fluctuates daily depending on the money market.

Administrative Divisions

According to the latest divisions of the country, Iran is divided into 30 provinces, including Ardabil, Azarbayjan- e Gharbi, Azarbayjane Sharqi, Bushehr, Chahar Mahall va Bakhtiari, Esfahan, Fars, Gilan, Golestan, Hamedan, Hormozgan, Ilam, Kerman, Kermanshah, Khorasan-e-Shomali, Khorasan-e-Jonoobi, Khorasan-e-Razavi, Khuzestan, Kohkiluyeh & Buyer Ahmad, Kordestan, Lorestan, Markazi, Mazandaran, Qazvin, Qom, Semnan, Sistan & Baluchestan, Tehran, Yazd, Zanjan
About Semnan

Semnan is located 216 kilometers east of Tehran in north central Iran. It is home to Semnani languages and is known as Seman locally. The city offers various recreational activities, historical and religious sites, festivals, gardens and parks, colleges and universities, and Semnani culture. The city serves as the cultural and political capital of the Semnan Province. The city’s main souvenirs are daffodil flowers, Shirmal pastry, Koluçe cookies, kilim rugs, and shortbread.

Geography

The city of Semnan is situated at 1,138 meters above the sea level just south of the foothills of the Alborz Mountains, bordering the Desert (Kavir) to the south of the city. However the Golerudbar river which begins from the north of Shahmirzad and other creeks have historically provided a reliable supply of water for a civil establishment; irrigation methods since ancient times have allowed the people of Semnan to drink clean water to raise livestock such as cattle and sheep, and to adopt agricultural practices. Unlike modern day Tehran, the city of Semnan is relatively flat.
Climate

The city of Semnan enjoys the traditional four seasons of spring, summer, winter, and autumn each year. The rain season starts in December and lasts all the way into May, however, precipitation throughout the winter months generally falls in the form of light snow, and the rest of the precipitation throughout the rain season is generally very light to moderate. During some winters, moisture-abundant blizzards make their way down from the Alborz mountains from the north of the city and dump several centimeters of snow in a single twenty-four-hour period. These blizzards force the closure of the airport, schools, small streets, and alleyways. As a result of the city’s position in a semi-arid plain, many winter days are dominated by a cold and gusty wind that often produces a potent wind-chill factor which makes the city feel much colder than the actual air temperature. According to Iranian Meteorology reports, Semnan experiences around 48 days in which the temperature falls below freezing each year.

Spring is characterized by mild to warm day temperatures and cold to cool nights along with a reduction in precipitation as the season transitions into summer.

Summer is often characterized by hot daily temperatures and warm nights. Summer months remain dry with trace amounts of rainfall. Occasionally, moisture from the Caspian Sea files through the Alborz mountains; the updraft of warm and moist air up the high mountain sides produces partly cloudy skies dominated by cumulus clouds. With the right amounts of heat and moisture, thunderstorms may develop during the afternoon and evening hours. Though the amount of precipitation is light, these thunderstorms often produce strong and gusty winds with frequent lightning strikes.

Autumn is also a transitional season in which the daily temperatures range from hot to cool along with cool nights.
Historical Sites and Places of Interest

Due to the relatively small size of Semnan when compared to other major Iranian cities such as Tehran, Tabriz, and Mashhad, Semnan’s rich historical monuments and scholarly figures are often forgotten. The following are some of the city’s historical sites and places of interest:

Jame’ Mosque of Semnan – built nearly 1,000 years ago by the Seljuq Turks over what used to be an ancient Zoroastrian fire temple. This ancient mosque also includes the famous Seljuq minaret with archaic carvings and designs.

Imam Mosque (Soltani Mosque) – built under the Qajar dynasty, this mosque is a rare four-terrace mosque. The design of the Imam Mosque utilized the expertise of Iranian architecture of the time, providing all sectors of the complex with equal acoustic sound systems.

The Shrine of Sheikh Ala’ed-dowleh Semnani – This shrine was constructed by the Safavid dynasty in honor of Sheikh Ala’ed-dowleh Semnani, a major Sufi mystic and poet of Iran.

Threshold of the Alavids – A memorial shrine to the Alavid sayyids that administered the affairs of the city during the reign of the Alavid dynasty, centered in the ancient region of Tabaristan. The shrine also has religious value, being that the Alavids were the direct descendants of the second Shi’a Imam, Imam Hassan. Imamzadeh Yahya Mosque – Aside from the mosque’s aesthetic tile work and architectural design, this is a designated place of Ziyarah, or Islamic pilgrimage. The mosque is characterized by its massive entrance, stained glass windows, glossy marble flooring, and unique interior design.

Imamzadeh Ali ibn Jafar Mosque – Another place of Ziyarah, or Islamic pilgrimage, with aesthetic tile work and architectural design. The mosque is characterized by its green domes and a massive adobe dome that towers above the complex.

Imamzadeh Ali ibn Ashraf Mosque – A beautiful mosque and place of Ziyarah, or Islamic pilgrimage.

Memorial of the Martyrs (Mezar Shohada) – this building was constructed as an interior cemetery for the soldiers of Semnan that were martyred in the brutal Iran–Iraq War of 1980–1988. The building consists of a glossy marble flooring, elegant chandeliers, murals, and stained glass windows.
Hakim Elahi Mausoleum – Hakim Elahi was a prominent scholar of Islam and philosophy.

Pehne Hot Springs – a public bath house which uses hot therapeutic waters. These waters are utilized for relaxation as well as hydrotherapy.

The Gate of the Semnan Fortress – built by the Qajar dynasty under Prince Bahman Mirzayee Baha‘ed-dowleh, the son of Fath Ali Shah Qajar. Unfortunately, Reza Shah Pahlavi destroyed the other three entrances and the walls around the old city under the pretext of road construction.

Semnan Bazaar – the place to buy the souvenirs, handicrafts, appliances, food items, etc.

Pehne Bazaar – a large and vast center of commerce with multiple wings. Similar to most bazaars in Iran, Pehne Bazaar has almost all the necessities as well as local products.

Sheikh Ala‘ed-dowleh Bazaar – a traditional center of commerce that carries all the basic necessities as well as tourist items.

Tadayyon House – A mansion style home of the wealthy class in the Qajar era of Semnan. This multi-story complex consists of a stable, a massive kitchen, a traditional cistern of water, along with a towering wind catcher, signature of Iran’s arid cities. The complex also features a unique Azerbaijani architectural design, signature of Qajar era buildings.

The Interior Gardens of Semnan (Baghat Dakhil Shahr) – These massive gardens cover the entire southwestern portion of the city in a green, lush, and forested environment. The main trees that dominate the landscape are walnut and pomegranate trees. Within the gardens are numerous creeks trickling along the irrigated paths, as well as traditional adobe brick homes which provide much of the housing for the “Maleh” district of Semnan.

The Garden Restaurant – This is by far the most traditional restaurant in the city of Semnan. The Garden Restaurant offers a traditional Iranian cuisine, including local dishes, and a beautiful outdoor dining experience. The restaurant features an entrance arch decorated with stained glass mosaic windows leading into a large courtyard filled with fountains, trees, flowers, and running water.
Historical Innovations

Semnan’s proximity to the Kavir Desert has provided the city with the opportunity to construct numerous facilities in order to cope with the dry climate. As a result, Semnan has numerous ancient, traditional irrigation systems known as qanat. In addition, the roofs of many buildings are decorated with wind catchers known in Persian as Baadgir. These Baadgir were normally attached to a small cistern of drinking water known in Persian as Abanbar. These ancient, traditional, and clever designs and systems helped Semnan grow and prosper before the introduction of modern plumbing and appliances. Within the vicinity of the city, ancient caravanserais from the active era of the historic and legendary Silk Road can be found.

Economy

The city of Semnan has traditionally been an important center of commerce along the historical Silk Road, and is still an important agricultural, industrial, and cultural center today.

Industrial Sector

The production of textiles and carpets were the most important industries in the history of the city. But nowadays, in relation to its population, Semnan has very powerful industrial sectors, with special regards to its automobile industry (cars and bikes). Another major industry is the production of cement from the nearby cement plants. The mountains and foothills around Semnan also hold major deposits of minerals used in the production of plaster; these mines are known in Persian as ma’dan –e- gach. Other minerals that are mined around the city consist of gypsum, salts, zeolite, bentonite, and celestine. Some heavy industries of Semnan consist of the Iran Khodro Semnan Production Plant (producing 100,000 Samand cars per year), Qqab Afshan Production Plant (largest bus production plant in the region of Asia), the Semnan Sodium Carbonate Company (largest in the region of Asia), and the Semnan Rolling Mills Group (major producer of piping and profiles). One of the largest industrial zones in the city is the Semnan Industrial Town, which features 2,100 hectares of land and 900 industrial units.
Agricultural Sector

Agricultural traditions still persist around and within the city of Semnan. The Golrudbar river, which starts in the Alborz mountains in the north, runs through the western side of the city. With proper irrigation, the municipality has managed to convert the entire southwestern portion of the city into green and lush pomegranate gardens. Around the city, further irrigation of the Golrudbar river and the surrounding creeks and tributaries have provided the proper environment for the cultivation of herbs, eggplants, potatoes, walnuts, and cotton.

Semnan also produces hand-woven rugs called Gilm. These rugs consist of naturally dyed wools, woven into beautiful tribal and local designs.

Unique Food and Dishes

The people of Semnan have many foods and dishes that are specific to Semnan. Some of the common ingredients used in Semnani dishes consist of pomegranate extracts, fresh walnuts from Shahmirzad, a variety of greens and herbs known in Persian as sabzijat, and more recently, potatoes. Semnani food tends to be slightly sour and spicy when compared to the general culinary preferences of Tehran. In fact, there is an old proverb among the local people that says, “Semnan has so many foods, that a wife from this city can cook a different dish for every night of the year.”

Some of the famous dishes are: Chelo Gousht, Sabzi polo, and Khoresht e Esfanaj va Gerdou. The Semnani people are also quite fond of a variety of breads such as shirmal, shortbread (kamôç), and Kolüçe pastries. In the Semnani language, bread that is baked in an oven is referred to as “Nûn,” while bread made by other means is referred to as “sôджi.”

The following are the names of some foods in English: chicken, pomegranate, grapes, cucumber, walnut, eggplant, and apricot.
Vice-Chancellors

- Vice-Chancellor for Education
- Vice-Chancellor for Research and Technology
- Vice-Chancellor for Students and Cultural Affairs
- Vice-Chancellor for Treatment
- Vice-Chancellor for Management and Resource Development
- Vice-Chancellor for Health
- Vice-Chancellor for Drug and Food
- Vice-Chancellor for Social Affairs
The Vice Chancellor for Education is responsible for academic policy making, coordination of all educational activities, provision of support for academic activities, supervision over proper enforcement of the assigned responsibilities of the associated institutions, as well as planning to promote educational quality. The duties are enforced through the following subordinates Directorates:

- Directorate for Educational Affairs renders educational/administrative services to students in all levels;
- Educational Development Center masterminds planning the university’s educational programs and tries to promote the quality of education through developmental projects, faculty development initiatives, as well as evaluation of the faculty and the delivered courses;
- Continuous Medical Education Office plans and coordinates CME activities and evaluates them.

The Vice Chancellor for Education is also in charge of many administrative and academic affairs pertinent to the faculty members. This includes but is not limited to faculty promotion, tenure, and hiring and allocating new academic staff. All the above-mentioned responsibilities are aligned with SEMUMS long-term plan and are accomplished in collaboration with associated departments, schools, and institutions.

Educational Development Center (EDC)

The Educational Development Center (EDC) of Semnan University of Medical Sciences not only aims at promoting the teaching quality in both theoretical and applied science, but also is concerned with specialized competencies and qualifications of the staff as well as the course contents. Naturally, the advent and development of the teaching-learning processes are primarily geared with the educational needs of the target community rather than technological advancements or institutional policies. These critical issues, however, cannot be completely neglected. This center has proved competent in updating health providers’ education and has played an important role in more appropriate and rational utilization of resources.

A wide range of activities concerning staff development is rendered by EDC whose details can be detected in its function. Considering the university study strategies, EDC supports the faculty members and anyone playing a part in the academic society especially through workshops and specific meetings planned to this purpose. Some such special courses are planned to meet the needs of the younger faculty members while others are more concerned with any participants whether a faculty member or ordinary graduates giving them more self-confidence to assert their competencies and to flourish their potentials. Current courses aim at protecting those involved in research in education and encouraging educational research as a proper basis for educational policies.

Although research in education consists of several parts and projects, they all share the same principles. Equity is one of such objectives; providing equal opportunities for all those involved in the project. EDC policies are to be adapted to the specific needs of all faculties and departments. This is a justification for the Educational Development Office (EDO) in every faculty and the educational committee in certain departments.

Objectives

As a specialized training center, the institutional objectives of EDC in SEMUMS are as follows:

1. Supervising curriculum development;
2. Promoting quality in-service training meeting the community needs utilizing appropriate media;
3. Ensuring access to designing appropriate approaches to education and evaluation systems for all departments;
4. Organizing staff development trainings based on their own priorities;
5. Launching research and appropriate teaching methods to promote skills, competencies, and the efficient functioning of medical graduates;
6. Teaching, organizing, supporting, and supervising research in education projects;
7. Evaluating teaching-learning activities throughout SEMUMS;
8. Promoting dynamic development of the faculty in medical education;
9. Developing and practicing modern educational approaches, including electronic education throughout SEMUMS.
10. Roles and Activities
Aligned with SEMUMS strategic planning, EDC aims at promoting educational standards and quality teaching. Therefore, promoting the faculty members’ teaching skills and students’ learning capabilities are targeted, which requires the following functions for EDC in SEMUMS.

1. Promoting Educational standards;
2. Promoting research in education;
3. Evaluating teaching-learning methods;
4. Promoting students' learning capabilities;
5. Promoting academic research;
6. Promoting students’ consciousness by having access to current knowledge;
7. Attaining the necessary equipment and resources;
8. Promoting knowledge, attitude, and competencies of medical care providers under the university coverage through continuing education programs;

**Vice-Chancellor for Research and Technology**

The Vice Chancellor for Research & Technology includes five subordinate Directorates in charge of Research, Medical Statistics and Information providing, the Central Library, and the Center for Documents, Publications, and Printing House. The Office is responsible for providing the grounds for research work, supplying scientific resources, providing for publication of scientific productions and expansion of scientific ties with other academic institutions. All these activities are designed with the cooperation of all departments, associated schools, and research centers, within the long-term research plan of the University. This Office is also responsible for:

- conducting different research-oriented educational courses and supervision over the cycle of proposed research plans through drawing up the related contracts;
- Supplying, and distributing scientific resources--both printed and digital;
- Helping with scientific conferences to be held and facilitating the participation of faculty members in them; and,
- Establishing scientific relations with foreign centers, and expansion of the University's computer network.

**Vice-Chancellor for Students and Cultural Affairs**

The mission of this Vice Chancellor is to protect students’ rights, and to provide for nurturing their creativity and dormant intellectual, social, and physical talents. This Office is also responsible for the university's fundamental tasks. They aim at preparing the students for their responsibilities in society, workplace, and undertaking a dynamic family life. In line with these goals, the Office is responsible for providing welfare services, and facilitating extracurricular athletic and artistic student activities, scientific and sightseeing tours, and student celebrations. The above-mentioned tasks have provided for the establishment of subordinate Directorates in charge of Student Affairs, Physical Education, Cultural Affairs and Extracurricular Activities, Health, and Counseling and Guidance extensively managed by the students. Welfare and student-related affairs are run under the supervision of the Student Council, while cultural activities of the Office are performed under the supervision of the Cultural Council consisting of the managers of the Office and students representatives.

Inspired by the contents of Islamic Republic of Iran’s 1404 Vision, we need to achieve a dynamic and pioneering society in various arenas, a prerequisite to which would be having a sophisticated and pioneering university. A university, which alongside educational and research development, has reached its optimum cultural point. In addition, the students, faculty members, and staff of the university need to be benefited from the cultural solidarity and Iranian-Islamic identity. Based on this, the Vice Chancellor for Students and Cultural Affairs attempts to contribute to the University’s goals through planning for creating solidarity and unity in cultural programs, intervening in cultural planning, preventing redundancies and building concordance with the macro policies of the university based on Iranian-Islamic sublime values.
Goals:
• Developing and deepening religious culture and ideology in the academicians’ lives;
• Recognizing culturally talented and gifted figures, developing and preparing the grounds for the facilitation of elites’ noble thinking climate;
• Improving the research-oriented spirit among academicians and their cultural needs;
• Improving spiritual health of academicians;
• Promoting cultural activities to revitalize and improve the academicians’ Iranian-Islamic identity;
• Determining the training and moral role of professors and appreciating their sublime position;
• Familiarizing faculty members with ‘soft war’ and how to cope with it based on Islamic power principles.

Plans:
Based on the 13-fold strategies of the University’s Scientific Plan in cultural arenas, a number of plans are conducted in the cultural fields including:
• Developing and determining the most important and highly prioritized aspects in the cultural movement;
• Running educational and promotional programs to keep and develop cultural space;
• Running and hosting attractive cultural-religious plans and competitions to indirectly convey cultural and religious messages.

The Secretariat for the Faculty Members’ Promotion Regulations
This secretariat has been founded for the faculty members in order to receive special cultural privileges in the Vice Chancellor for Students and Cultural Affairs. This secretariat is responsible for assessing and scoring the cultural activities of the faculty members of the University.

Vice-Chancellor for Treatment
The Vice Chancellor for treatment has a leading role in providing, facilitating, promoting and preserving public health, and representing medical services in medical and allied medical sciences institute of the university.

According to the improvement and promotion of the quality of services based on standard models, the Vice Chancellor for treatment in SEMUMS pursues the following goals:
- Community benefit from qualitative, safe, effective, and efficient health care services and evidence-based health management;
- Providing and sustaining finance of medical care and services;
- Financial protection of people against health costs in accordance with the laws of the country;
- Promoting accountability and increasing the level of satisfaction of services to recipients and providers;
- Quality improvement in planning, coordinating and monitoring health care services;
- Improving the ability of directors, managers, and employees with optimum use of resources;
- Developing a comprehensive system of data management, information, and communication;
- Increasing the capacity and creating a framework for conducting applied research.

Vice-Chancellor for Health
The Vice Chancellor for Health seeks to meet the healthcare needs of the society through education (training manpower, etc.) and research (identifying the needs to be dealt with). The Office is also responsible for discovering present and future health-care needs of the population undercover, supervising over the health care services rendered at the first and second levels, as well as referring patients to higher-level services, improving the quality of services, and solving health problems of the society. This Office is in charge of planning for expansion of health-care centers, providing easy access to these services, running studies to detect the endemic, epidemiologic and regional diseases, identifying and classifying health problems of the region undercover, developing and performing related applied research, supplying the needs of the affiliated health centers and supervising their functions, collecting, classifying and analyzing data needed for health programs, and systematic evaluation of such programs.

Vice-Chancellor for Drug and Food
Major responsibilities of the Vice-Chancellor for Drug and Food include the followings:
Supplying and providing needed drugs including narcotics and drugs for special diseases;
- Supervising methods of drug distribution at all related units of the SEMUMS;
- Issuing certification of establishment and technical liability and products for the described units;
- Supervising the activities of all private and governmental drugstores;
- Promoting proper use of drugs with attention to the activity of controlled unit;
- Issuing certification for importing drugs and preliminary materials for drugs formulation;
- Observing the safety and security of foods and cosmetic products, which have brands and health licenses from FDO (Food and Drug Organization);
- Controlling and supervising licenses procedures for food and cosmetic factories;
- Exchanging information with local and international scientific and legal agencies relating food and cosmetics;
- Conducting researches and applied studies to pinpoint health problems, their causes and identify their effects;
- Supervising and inspecting manufacturing factories, storage centers, and distribution centers for food and cosmetic products;
- Issuing certification for inauguration of imports and allowance of customs for preliminary materials and processed food and cosmetic products;
- Ensuring the safety of foods for humans and ensuring compliance with the standards;
- Ensuring that food labels are truthful and contain reliable information that consumers can use to choose healthy diet;
- Performing microbial and chemical evaluations on food, cosmetic and hygienic samples at level of marketability and demands to provide the best protection of consumers of these products.

**Vice-Chancellor for Social Affairs**

Vice-Chancellor for social affairs is a new structure with high capability to manage the social capacity in health sector along with a professional view at it.

The main objectives of this department are:

- To identify, guide and support the capacities of the charities and promote the health system;
- To design and implement the native models to participate the public contributions;
- To encourage NGOs and charities to contribute in the field of health and policy making in order to enhance the role of people in health promotion and to reduce the government's enterprise.

Special attention to social determinants affecting on health through strengthening of research and development is one of the main missions of this department; it conducts half of the determinants affecting the health. Obviously, this can be done through interaction, coordination and cooperation with governmental organizations and the public institutions. By strengthening the health and food safety committee in Semnan province and by means of the capacity of the university, the development and reinforcement of the systematic cooperation between the sectors of university are achieved.

Using the potential and the capacities of the Islamic centers to strengthen the spiritual dimensions of health, and also, Islamic culture, in order to encourage people to participate in the social activities. Likewise, as an important strategy, it will expand the activities of health donors via donation, charity, volunteer activities, and donation to the health sectors.
Schools

- School of Medicine
- School of Dentistry
- School of Rehabilitation
- School of Nursing and Midwifery
- School of Health
- School of Allied Medical Sciences
- School of Nutrition, Food Sciences and Allied Medical Sciences
School of Medicine

Objectives:

- 01221- Teaching medical sciences to students
- Conducting scientific research in different fields of medicine, health and treatment
- Coordinating the education, research and treatment policies
- Holding scientific conferences through collaboration with related authorities
- Provision of required faculty members and supervising the proper implementation of educational, research and treatment affairs
- Training GPs and specialists in various fields of clinical medicine to promote the health
- Cooperating in offering the continuous education to the Province medical community through educational committees
- Training postgraduate students (MSc) to meet the treatment and health-requirements and having cooperation with academic staff in the universities and research centers in the country. Conducting fundamental and applied research in basic and clinical sciences to fulfill health-treatment needs and extending the knowledge boundaries, and offering solution to the present questions and problems through educational committees, research centers, educational centers and interuniversity cooperation
- Offering health and treatment services to hospitals and affiliated health centers in order to create a proper atmosphere for students and trainees
- Cooperating in educating the students of various fields in Semnan University of Medical Sciences and other universities in the country
The School will graduate health professionals who:

- Are clinically excellent, compassionate, respectful and empathetic;
- Demonstrate ethical and professional behavior in all their actions;
- Will contribute meaningfully to address the health disparity experienced through practice;
- Champion social justice through reducing inequalities and disparities in health care;
- Have a strong commitment to and capacity for lifelong learning, reflective practice, personal health and wellbeing;
- Contribute significantly to health care in rural and other underserved populations in different areas;
- Engage in scholarly research and advance the body of medical knowledge; and
- Apply a strong scientific basis to clinical practice.

To achieve these goals, the School will:

- Deliver high quality medical and health education;
- Attract students who value the mission and goals of the School;
- Continue to attract high quality staff who will engage in excellent teaching and research;
- Advance the role of the educator through innovative and engaging professional development opportunities;
- Establish medical education and research centers of excellence;
- Value community involvement and strengthen collaborative partnerships with stakeholders;
- Continue to a collaborative and supportive learning, teaching and research environment;
- Demonstrate responsible stewardship of resources.

Departments:

**Basic Sciences:**

- Anatomy
- Bacteriology-Virology
- Biochemistry
- Biotechnology
- Immunology
- Medical Physics
- Community Medicine
- Parasitology
- Physiology
- Islamic Teaching
- English Language

**Clinical Sciences:**

- Obstetrics and Gynecology
- Internal Medicine
- Pediatrics
- Surgery
Study Programs in School of Medicine

BSc:
• Laboratory Sciences

MSc:
• Anatomy
• Physiology
• Biochemistry
• Immunology
• Medical Physics
• General Practitioner/General Physician (MD)

PhD:
• Physiology
• Biotechnology
• Applied Cell Sciences

Specialty
• Internal Medicine
• Pediatrics
• Obstetrics & Gynecology
• Anesthesia
School of Dentistry

The Faculty of Dentistry is committed to maintain a leadership role in oral health education, in scientific research and in the promotion of oral health and quality of life in the whole population, with an emphasis on the needs of under-served communities and individuals. Our diverse programs work synergistically, ensuring that every aspect of our teaching, research and outreach mission offer excellence in teaching, learning and care.

Prospects for Future

We are determined to promote the school’s academic excellence, raise the standards of oral health in the community and join the circle of highly qualified dental schools in the country through optimizing instruction standards and innovative research programs.

Mission

Semnan Faculty of Dentistry as a part of a major university has combined and enjoyed the endeavors of competent and qualified academic staff with appropriate facilities and has committed itself to:

Train highly qualified general practitioners and specialists;
• Update the knowledge and skill of the graduates;
• Raise the standards of oral health and care in the region and all over the country;
• Discover new areas of knowledge through promoting research programs;
• Actively getting involved in providing dental services with greater emphasis on vulnerable groups; and actively cooperating with policy-making centers involved in promoting oral health and care.
D.D.S. is a six-year program which consists of a competency-based educational plan with emphasis on prevention caring, so that graduate students, besides sufficient and comprehensive knowledge in up-to-date dentistry sciences, have the skills for visiting patients and treating different kinds of oral and dental diseases. In this program, students pass basic sciences in two years and then enter the clinic for 4 years in order to pass courses in all dentistry departments and learn the diagnosis of different kinds of diseases in each department. As a result of working with numerous patients, students will become highly skilled in their clinical stage.

The students pass pre-clinic courses in the fifth semester in laboratories with different kinds of moulages and educational models that are simulated with real clinical conditions and patients. After acquiring the requirements, eligible students enter the clinics, and visit and treat patients. In the clinical stage, students (in small groups) enter the clinic and treat patients. There is a Community Dentistry program with the aim of screening patients in the society.

In the twelfth semester, students who have acquired enough skills as interns or pre-doctoral students enter the main clinic and visit patients in a similar fashion to practices in a private office under the supervision of proficient professors. In the main clinic, students, besides making medical files for the main treatment program, treat all kinds of dental problems of patients.
Departments

- Periodontics
- Oral and Maxillofacial Radiology
- Orthodontics
- Operative dentistry
- Dental and Maxillofacial Pathology
- Restorative Dentistry
- Endodontics
- Pediatric Dentistry
- Oral Medicine
- Oral and Maxillofacial Surgery
- Prosthodontics
Regulations
Chapter One

Entrance and Enrollment Conditions

Article 1) Requirements for entering the Doctor of Dental Surgery Program are as follows:
1-1 Having complete physical and mental health.
Amendment: Paying the tuition does not exempt graduate students of the D.D.S. Program from performing other specific legal obligations.

Article 2) Education in the D.D.S. Program is a credit-based system.

Article 3) In a credit-based system, the value of each subject is assessed by its credit hours, and passing or failing in a subject is confined only to that subject.

Article 4) Each credit of a subject is the amount or measure of a subject that consists of 17 hours of theoretical lessons, 51 hours in workshops, 68 hours of internship, 34 hours of practical lessons (or laboratory), and 51 hours of apprenticeship during a semester or a summer course.

Article 5) The D.D.S. Program consists of the stages below:
Stage 1: General subjects, basic sciences and 10 credits from specialized dentistry subjects
Stage 2: Specialized dentistry subjects

Article 6) Each academic year consists of two semesters and, if necessary, a summer course. Observing the substance of Article 4, each semester consists of 17 academic weeks and the summer course is equal to 6 academic weeks.
Amendment: The period of examinations at the end of each semester or summer course is excluded from the mentioned 17 and 6 academic weeks.

Article 7) In the clinical stage, each semester consists of the several clinical education parts. The number of the parts of the clinical stage during each semester, with consideration towards the necessary amount of time for the teaching of each stage, is ascertained by the educational council of the school.

Article 8) All universities and faculties of medical sciences are obliged to carry out the curriculum and lesson titles approved by Medical Sciences High Council of Planning.
Amendment: The order of the academic subjects while observing the prerequisites, teaching methodology, evaluation of students’ based on modern educational methods, with regard to the conditions and resources of faculties, reordering of lesson titles, presenting new materials in one subject and choosing new resources, are the responsibility of universities and medical faculties. It is obvious that resources for the Basic Sciences Comprehensive Examination will be ascertained by the corresponding ministry.

Article 9) At the end of the first stage, the Basic Sciences Comprehensive Examination takes place. Passing this exam is the requirement for entering the next stage.
Amendment 1: The requirement for participating in the Basic Sciences Comprehensive Examination is passing all subjects in stage one and acquiring a minimum GPA of 12. However, in cases when a student has, in maximum, 5 credits remaining, (including theoretical or practical, general or specialized, failed subjects or those never taken) he or she can participate in the Basic Sciences Comprehensive Examination and, if passed, he or she can take the remaining credits in the next stage. It is clear that the marks of those remaining credits will be calculated in total average of stage two.
Amendment 2: If at the time of registration for the Basic Sciences Comprehensive Examination, the marks for the subjects the student has taken have not yet been announced, the student can conditionally partici-
pate in the examination. If after announcing the marks, the student failed those subjects and did not meet the requirements for sitting the Basic Sciences Comprehensive Examination (as in Amendment 1), the result of that comprehensive examination will be considered null and void, and the aforementioned exam will not be counted in the number of times participation is allowed. The student, until acquiring passing scores in the failed subjects and meeting the requirements for participating in the comprehensive examination, will not be allowed, even conditionally, to sit the next exam.

Article 10) Participation in the Basic Sciences Comprehensive Examination is allowed three times. If the student fails to acquire a passing grade in the exam, he or she will be barred from continuing education in the D.D.S. Program.

Amendment 1: Unjustified absence in the Basic Sciences Comprehensive Examination will be considered as one participation.

Amendment 2: Students barred from continuing education in the program of dentistry due to failing the Basic Sciences Comprehensive Examination, can, according to the instructions of changing majors by students in the M.D., D.D.S. and Pharm.D. programs (approved by 22nd meeting of Medical Sciences High Council of Planning in 2003), change his or her major to a continuous or non-continuous Bachelor’s degree or a two-year postgraduate certificate course.

Article 11) The credits of comprehensive dentistry treatment (internship) will be rendered in the last year of the D.D.S. program.

Amendment: The location of internship, in order to due to acquiring skills and a comprehensive viewpoint toward patient, and performing relative treatments, can be educational wards and medical centers under supervision, in a manner that at least one school member from all departments are present in a ward or center at the same time.

Chapter Two

Credits and Academic Duration

Article 12) The minimum required number of credits for graduating in the D.D.S. Program is according to the academic plan for that program, approved by the Medical Sciences High Council of Planning.

Article 13) Students, in each semester of academic stages of the D.D.S. Program, must take at least 12 and at most 20 credits.

Amendment 1: In the last semester in each academic stage, the student does not necessarily have to observe the 12-credit minimum rule.

Amendment 2: If a student acquires a minimum total average of 17 in a semester, he or she can, with the agreement of the supervisor and the school, take a maximum of 24 credits in the next semester.

Amendment 3: In semesters for which students have a maximum of 24 remaining credits to finish an academic stage, they can take that entire number provided that they have not been in probationary status the previous semester.

Amendment 4: In summer courses, students are not allowed to take more than 6 credits.

Article 14) The maximum duration for the D.D.S. Program is a total of 9 years, the first 3.5 years of which is allocated to the first stage and the next 5.5 years to the second stage.

Amendment 1: If students fail to acquire a passing score in the Basic Sciences Comprehensive Examination during the 3.5 years, they will be barred from continuing education in the program of dentistry, and, according to the directions in Amendment 2 of Article 10, they can change their major to a continuous or non-continuous Bachelor’s degree or a two-year certificate course.

Amendment 2: For students who are unable to finish the second academic stage in 5.5 years from beginning of this stage, with the approval of the university’s educational council and provided that the allowed time for the students’ education is not over, the academic period can be renewed for a maximum of 12 months.
Chapter Three

Attendance

Article 15) The presence of students is necessary in all class sessions and failing to attend a class will be counted absence.

Article 16) Students’ hours of absence must not exceed 4/17 of theoretical lessons, 2/17 of practical lesson and laboratory sessions, and 1/10 of training, internship and workshop. Otherwise, the score for those lessons would be zero and the students must retake the subject.

Amendment: The absence limit in Article 16 will be permissible if it is justified by presenting documented evidence and the discernment of the professor. Confronting the absence (justified or not) is the responsibility of the professor and is bound to the confirmation of the school.

Article 17) If the absences of a student in a subject exceed the limits in Article 16 and are recognized as justified, that subject will be deleted. In such cases, observing the minimum of 12 credits limitation in a semester is not necessary, but that semester will be counted as a full semester in the student’s academic years.

Article 18) Unjustified absence in a subject’s final exam is considered as acquiring a score of zero in that exam. A justified absence leads to the deletion of the subject, and the student must retake that subject. Determining the whether the absence on a final exam session was justified or not is the responsibility of the educational council of the university.

Chapter Four

Addition and Deletion

Article 19) In each semester of all stages in the D.D.S. Program, in a window of less than two weeks from the beginning of the semester, students can delete two taken subjects, add two new subjects, or substitute two taken ones by two other subjects, provided that their credits do not exceed the limit in Article 13.

Amendment 1: Absence in class sessions of the first two weeks is not allowed for reasons of addition/deletion, and absence during this time will be counted in the maximum absence limit (mentioned in Article 16) and the contents of the mentioned article will be implemented.

Amendment 2: Addition and deletion in summer courses is not allowed.

Article 20) In cases of emergency, upon the recommendation of the department and the confirmation of the school’s Vice-Dean for Education, students can delete only a single theoretical subject 5 weeks prior to the end of the semester, provided that firstly, they have not exceeded the absence limit for that subject according to Article 16, and secondly, the number of their remaining credits do not go below 12.

Article 21) The deletion of all credits in a semester prior to the start of the final examinations is allowed if and only if, based on the opinion of the educational council, the student is incapable of continuing the semester. In that case, that semester would count as a semester of academic leave for the student. Counting such a semester in the academic years of a student, or not regarding it as one, is the responsibility of the educational council of the university.

Amendment: Deletion of all subjects in a summer course before the start of the examinations is allowed with the approval of the educational council of the university.

Chapter Five

Assessment of Students’ Academic Progress

Article 22) Assessment of students’ progress in each subject is based upon class attendance and par-
participation, undertaking educational tasks and the results of mid-term and final exams. Professors are the
assessment authority in each subject.

Amendment: Holding final written exams at the end of each semester is obligatory for all theoretical and
workshop subjects.

Article 23) Assessment of students’ academic progress in clinical stages is done by considering the follow-
ing items:

23-1 Observing Islamic moral behavior and students’ codes of conduct, and appropriate relationship
with patients, clients and the staff of the ward
23-2 Regular and full-time attendance in the clinic and related classes
23-3 Attention and sense of responsibility in undertaking assigned tasks in accordance with the clinic’s
regulations, such as preparing and completing patients’ files
23-4 Improving skills and enjoying learning in the clinical stage
23-5 Attending exams of practical subjects and acquiring the required score

Article 24) The results of the assessment of students’ academic progress are determined based on the
contents of Articles 22 and 23 and presented in numbers. The score of each student will be provided as a
number in the range of 0-20.

Article 25) The minimum passing score is 10 for general subjects and basic sciences and 12 for specialized
subjects in the D.D.S. program.

Amendment 1: Students who fail to acquire the minimum passing score in a subject are obliged to retake
that subject at the earliest opportunity. However, all the scores including those from passed or failed sub-
jects will be recorded in the students’ academic record and are calculated in their final total average.

Amendment 2: Each theoretical, practical, workshop, internship and apprenticeship subject has an inde-
dependent score, but for a subject that is a mixture of two educational states (such as theoretical-workshop
subjects or theoretical-practical ones) and is considered as a single subject, the minimum score of each
part is 10 and the overall score of that subject is the average of the two parts with consideration to their
multipliers. Failure to acquire the subject’s minimum final score based on the contents of Article 25, and
failure to acquire the minimum score of 10 in each part of the subject results in repeating both parts of the
subject.

Article 26) Professor(s) of each subject or part of a subject are obligated to report the final scores of student
within 10 days after the final exam date to the school via their corresponding department.

Amendment: After the announcement of the scores by the school's educational department, students can
submit their objections in written form within 3 days after the announcement date for due consideration.

Article 27) Each semester, the educational department of the school is obliged to submit the students’
scores to the main educational department of the university within at most 2 weeks following the last final
exam day after considering students’ objections and rectifying any possible mistakes.

Amendment: Scores cannot be changed after being delivered to the main Educational Department of the
university.

Article 28) At the end of each academic semester, the average scores of students in that semester, and
the average of all of their scores until the end of that semester, is calculated and, at the end of each stage
of the D.D.S. Program, the total average of all the students’ scores are calculated and recorded in the
academic records.

Amendment 1: For calculating the average of scores, the number of credits of each subject or part of a
subject is multiplied by the score of subject or part and the sum is divided by the total number of credits the
student has taken, including those passed or failed.

Amendment 2: The summer course is not regarded as a semester. The scores that the students acquire
in the summer course are calculated in the total average of the related stages and the total average of the
program.

Article 29) Students’ average of scores in each of the semesters of the first and second stages of the
D.D.S. Program must not be less than 12. Otherwise, the enrolment of student’s with such scores will be in a state of probation next semester.

Amendment 1: In cases when the credits delivered by the university are less than 12, that semester will not be counted in academic years of the student. However, in case of acquiring a lower than minimum required GPA, that semester will be regarded to be in a state of probation. In each stage of the D.D.S. Program, in cases when a student’s number of credits is below 12 due to the student’s own problems or because of the student being in the last semester, that semester will be counted in the student’s academic years and, also, a lower than 12 average will put the semester in a state of probation.

Amendment 2: The school is obliged to report, in writing, the probationary enrolment of students to them, and keep a copy of that report in the students’ files. Nevertheless, failure on the part of university to warn the student or the student’s claim of being unaware of this status does not impede execution of regulations.

Article 30) In each academic stage of the dentistry program, students enrolling in a probationary state are not allowed to choose more than 14 credits, even if they are in their last semester.

Amendment: In special cases (limitation in the maximum number of academic years), in the last academic semester of each academic stage of the dentistry program, rendering credits more than the allowed limit to students subject to Article 30, considering their remaining credits and academic records, is the responsibility of the educational council of the university. In any case, this number must not exceed 20.

Article 31) Students who are in a state of probation for 3 consecutive terms or 4 intermittent ones will be barred from continuing education, and, if the average of their total passed credits is at least 10, they can change their major, based on the instructions in Amendment 2, Article 10, into a continuous or non-continuous Bachelor’s degree or a two-year postgraduate certificate course.

Article 32) Students’ total average must not be below 12 at the end of the first educational stage and below 14 at the end of the second one in the dentistry program. A student who has acquired a lower average in each stage and his or her allowed duration of education has not ended, can retake the subjects or parts of subjects in which he or she has acquired a score below 12 or 14. Otherwise, they will not be allowed to enter the next educational stage or graduate. It is clear that the marks of the repeated subjects, along with those of subjects, are recorded in the students’ academic records and are calculated in their total average.

Amendment 1: If students, in order to compensate for their total average in each stage of the D.D.S. Program, repeat subjects or parts of subjects in which they have received a lower than 12 or 14 average, and fail the repeated subject, if their total average for that stage reaches the required passing score after the calculation of all passed, failed, and repeated subjects, their previous pass will be the measure of action, and they continue onto the next stage. If their total average for that stage does not reach the required minimum, they will fail that subject or part of subject, and though they have previously acquired a passing score, they must repeat that subject or the part of the subject.

Amendment 2: A student who is unable to or does not want to use the opportunity in the aforementioned article, or despite using it is unable to compensate his or her total average, can change their major into a continuous or non-continuous Bachelor’s degree or a two-year postgraduate certificate course, according to Article 10, Amendment 2.

Amendment 3: Requirements for taking the comprehensive treatment credits include observing the prerequisite regulations of the D.D.S. Program, and acquiring a total average (excluding the scores from the first stage) of 12.

Chapter Six

Academic Leave of Absence and Withdrawal

Article 33) Students, after one academic semester and during the first and second stages of the dentistry education, can take a leave of absence for a maximum of two semesters, consecutive or intermittent, both of which will be counted in their academic years.

Amendment 1: Agreement with the leave of absence of the student in the first semester of education is the responsibility of the educational council of the university.
Amendment 2: The duration of a student’s academic leave of absence is calculated in the maximum allowed duration of education in each stage.

Article 34) The request for academic leave of absence, in written form, must be handed in to the Educational Department of the university by the student, at least two weeks before the enrolment of each semester.

Amendment 1: If the request for academic leave is not submitted in the specified time, the decision will be the responsibility of the educational council of the university.

Amendment 2: After receiving the decision of the corresponding school, the Educational Department of the university must announce its agreement or disagreement to the student’s request in written form, before the end of the enrolment period.

Amendment 3: Consequences of academic leave are the responsibility of the student.

Article 35) Students, whose medical certifications and justified medical reasons have been approved by the medical council and the educational council of the university, can take a leave of absence for a maximum of one semester which will not be calculated in their academic years.

Article 36) If a student wants to resign from continuing education, he or she must submit a request, in person, to the Educational Department of the university. In that case, the student is allowed to withdraw his or her demand only once and at least a month before the end of that current semester. After the end of this period, the order of resignation will be issued and the student is not allowed to continue education in that major.

Amendment: If students who have withdrawn from education want to receive their academic records, they must comply with all legal obligations of their academic period.

Chapter Seven
Change of Major

Article 37) Students, provided that they have the following conditions and the corresponding universities’ agreements, can change their major into another:

37-Clause 1 The education of the student in the previous major must not be barred in terms of academic regulations.

37-Clause 2 The student must have passed a minimum of 1/6 and a maximum of 1/3 of all credits of the program.

37-Clause 3 Considering the maximum allowed time of education, the student must be able to pass subject credits of the new major in due time.

Amendment 1: Change of major for students who have been barred from continuing education in the D.D.S. program will be based on the directions in Article 10, Amendment 2.

Amendment 2: With the exception of those to whom Amendment 1 of this Article applies, students can change their major only once during their studies.

Article 38) Changing majors is only possible in the same educational level. Otherwise, by observing the regulations of Article 37, changing majors is only possible from a higher educational level to a lower one.

Article 39) If an agreement to a request of change of major is issued, students have to register and take credits in their new major. After enrolment, they cannot return to their previous major.

Amendment: Failure to register in the new major in due time will be considered as a withdrawal from change of major, and the student will not be allowed to change majors until the end of the program.

Article 40) Students are bound to the educational regulations of the previous major prior to enrolment in the new one.

Article 41) Passed subjects in the previous major will be checked, by the department, and replaced by equivalent subjects. Only those subjects that have at least an 80% content similarity, and in which the student has acquired a score of at least 12, will be accepted.

Amendment 1: Accepted subjects will be recorded in the academic records of students, and these scores will be calculated in their total average. However, scores of rejected subjects will remain in the students’ academic records without being calculated in their total average. If the total average of rejected subjects are
below 12, based on the decision of the educational council of the university, they will altogether be considered as a semester with the state of probation and will be recorded in the students’ academic records in his or her new major.

Amendment 2: If the number of rejected subjects does not let students pass the required credits in the new major in the allowed educational duration, their request of change of major will be denied.

Article 42) A student who wants to change his or her major must submit his or her documents at least 6 weeks prior to the beginning of the semester to the Educational Department of the university.

Article 43) If during their education, students encounter a health problem or have an accident, and the medical council of the university decides that they cannot continue education in general dentistry or are unable to benefit from its usages in the future, they do not have permission to continue education in the D.D.S. Program, and, by observing other related regulations, they can change their major to another major with the closest similarity in terms of the required entrance exam score. In this case, students are exempt from observing the regulations of Article 37 (with the exception of Article 37, Clause 1).

Amendment: In cases when students encounter mental and behavior disorders or deficiency in health or mutilation, in a way that they are unable to continue education in any of the majors of the related department, they can change their major to another major in another exam group which, in terms of the required entrance exam score, has the closest similarity to that of their previous exam group. This is only possible with the decision of the medical council and confirmation of the educational council of the university, and the agreement of the target university.

Chapter Eight

Thesis

Article 44) The thesis is a part of D.D.S. Program in which students are obliged to carry out research in a field related to their major under the supervision of supervisors.

Article 45) Students of the D.D.S. Program, after passing 120 subject credits of the D.D.S. Program, must choose the credit of Thesis 1 and register the topic of their thesis within a year.

Article 46) Supervisors are chosen based upon students’ suggestions and the approval of the corresponding department and the research council of the school.

Amendment 1: The academic position of supervisors must at least be assistant professor. In special cases, with the approval of the research council of the university, instructors can be chosen from school members.

Amendment 2: In special cases and with the approval of the research council of the school, in order to carry out interdisciplinary research, students can have more than one supervisor.

Article 47) If necessary, with the suggestion of the supervisor and after the approval of the research council of the university, a member of the school or a renowned specialist or researcher will be determined as supervisor.

Amendment: The maximum limit for the number of theses in the D.D.S. Program that are simultaneously supervised by each supervisor is attained by using this formula: Divide the number of freshman in each year by the number of all school members of the school, multiplied by 4. In faculties where the number of school members is high, and by using the aforementioned formula, the maximum number of each member is low, each member of school, based to his or her academic position and the approval of the research council of the school, will be able to simultaneously supervise at most 3 theses.

Article 48) Choosing the topic of the thesis must be under the supervision of the supervisor.

Article 49) The topic of the thesis must not be repetitious. This means that no thesis with similar topic, or a different topic with similar content, should have been carried out in the university in the past 5 years.

Amendment: In special cases and with the approval of the research council of the school, it is possible to write a thesis with similar topic and content for topic which may be in need of further research in a shorter duration than that mentioned above.

Article 50) Each and every student must choose a topic for a thesis.
Amendment: Choosing one topic by a group of students (maximum 3) is allowed with the approval of the supervisor and the research council of the school by observing the following conditions:

A: The volume and significance of the topic should fit the number of students.
B: The division of responsibility of the entire thesis must be in such a way that each student is able to carry out an independent section of the thesis.

Article 51) For registration of the topic of the thesis, the following stages must be undertaken:
A: Choosing the topic of thesis under the supervision of the supervisor
B: Checking the topic of the thesis in terms of being repetitious by the research council of the school
C: Approval of the suggested plan of the thesis in the corresponding department
D: Proposal of the suggested plan of the thesis by the department to the Office of Vice-Dean for Research for the thesis to be approved by the research council of the school
E: Announcing the approval of the research council of the school to the supervisor for the thesis to begin

Amendment: The time from the registration of the thesis topic and its defense session must not be less than a year

Article 52) Every thesis must include the following items:
A: Abstracts in Persian and English (significance and context, material and methodology, results and conclusion)
B: Introduction (reasons for significance of topic, general information in context of research, research goals)
C: Literature review
D: Methodology (research type, area and material of research, volume of sample and method of sampling, methods of data gathering, method of data analysis, different kinds of statistics tests and stages of performing)
E: Results (using statistics tests, tables, diagrams and presenting results)
F: Discussion and conclusion(s) (analyzing results, comparing results with other studies, analyzing the reasons of the difference between research results and that of other studies, analyzing shortcomings and limitations of the study, final conclusion, presenting suggestions)
G: References

Article 53) Theses must be written in English, though it is necessary to write the abstract in Persian as well as English.

Article 54) The board of examiners which produce the final decision for theses consist of following members:
1. Supervisor(s)
2. Advisor (if any)
3. Representative of the Vice-Dean for Research
4. Representative of the Vice-Dean for Education in the corresponding department
5. A member of the school, researchers, specialists and experts chosen by the department

Amendment: The academic position of the supervisor and members of the school must at least be assistant professor. In special conditions, with the approval of the research council of the school, they can be instructors. For researchers, specialists and experts, having a Ph.D. is necessary.

Article 55) Evaluation of theses by the board of examiners is on a scale of 0 to 20, and based on their score, they are categorized into four grades:
- Excellent: Theses with scores of 19-20
- Very good: Theses with scores of 17-18.99
- Good: Theses with scores of 14-16.99
- Unacceptable: Theses with scores of below 14

Amendment: Theses can attain the excellent grade if published in reliable domestic or international scientific magazines in the form of essays or whose acceptance of publication is presented. It is obvious that presenting an essay or its acceptance of publication is necessary for all theses and must take place before the defense session and announcement of their final score.

Article 56) All students are obliged to defend their theses in the last semester, and failure to do so and ac-
quire a passing score in the allowed duration of education, even if they have successfully passed all subject credits of the corresponding educational program, will result in the students being fired.

Article 57) The number of credits and scores of theses will be recorded in the last semester, and the students are exempted from observing the maximum allowed number of credits in the last semester.

Article 58) Graduation is the time when students pass all their subject credits, including their theses (whichever comes later).

Article 59) All rights related to theses are reserved by the university.

Article 60) A copy of the summary of each thesis must be sent to the Department of Research and Technology of the corresponding ministry for purposes of utilization and informing other centers.

Chapter Nine
Graduation

Article 61) Students who have successfully passed all subject credits and educational stages in general dentistry, and have successfully defended their theses based on the program approved in this regulations manual, will be recognized as graduate students of general dentistry.

D.D.S. Curriculum: 1st Year Courses
In the first year, students pass some general and basic sciences subjects, both theoretical and practical, in classes and laboratories. These subjects include:
  • Biochemistry
  • Physiology
  • Genetics
  • Histology
  • Oral Biology
  • General Pathology
  • General Anatomy

D.D.S. Curriculum: 2nd Year Courses
In the second year, students pass specialized subjects and the remaining general subjects both theoretically and practically. These subjects include:
  • Bacteriology
  • Immunology
  • Psychology
  • Communication Skills
  • Dental Public Health
  • Early Patient Contact
  • Dental Anatomy and Morphology

D.D.S. Curriculum: 3rd Year Courses
In the fifth semester, students enter pre-clinic courses and learn the models and moulages in laboratories. The pre-clinic subjects include:
  • Operative Dentistry
  • Prosthodontics
  • Periodontics
  • Orthodontics
  • Oral Surgery
  • Pediatric Dentistry
  • radiology

From the third year, they enter the clinic and start treating patients. The subjects of the sixth semester include:
  • Prosthodontics
• Oral Pathology
• Oral Surgery
• Endodontics
• Systemic Diseases
• Oral medicine
• Medical Emergencies in dental clinic
• Radiology
• Pharmacology
• Dental Public Health

D.D.S. Curriculum: 4th Year Courses
In the fourth year, students pass the following subjects, both practically and theoretically:
• Dental Public Health
• Oral Surgery
• Oral Diseases and Diagnosis
• Oral Radiology
• Oral Pathology
• Operative Dentistry
• Prosthodontics
• Orthodontics
• Endodontics
• Periodontics
• Systemic diseases
• Pediatric dentistry

D.D.S. Curriculum: 5th Year Courses
In the fifth year, students complete their skills in the following subjects:
• Orthodontics
• Periodontics
• Pediatric Dentistry
• Traumatology
• Advanced Operative Dentistry
• Advanced Endodontics
• Advanced Oral Surgery
• Research Methodology
• Prosthodontics
• Oral surgery
• Pharmacology

D.D.S. Curriculum: 6th Year Courses
In the eleventh semester, students pass the last practical subjects in the form of complementary courses for improving their skills and undertake the treatment of difficult cases, and prepare in order to enter the internship and pre-doctoral courses. These subjects include:
• Advanced Endodontics
• Advanced Periodontics
• Dental Public Health
• Advanced Prosthodontics
• Thesis’ Proposal Submission
• Pediatric Dentistry
• ENT

In the twelfth semester, eligible students reach the main clinical course and enter the main clinic. In this simulated clinic which is similar to a real dentist’s office, students of pre-doctoral course work on all types of treatments necessary for all kinds of patients. These treatments include:
• Endodontics
• Prosthodontics
• Periodontics
• Oral Surgery
• Implantology
• Radiology
• Systemic disease

At the end of this course, by participating in a final exam, the students' theoretical knowledge will be evaluated. Afterwards, they get ready for their thesis defense sessions. In the fifth year, they can carry out their thesis with the aid of a professor, and defend their thesis at the end of the twelfth semester. Restorative Dentistry is the study, diagnosis, and integrated management of diseases of the teeth and their supporting structures and the rehabilitation of the dentition to functional and aesthetic requirements of the individual.
School of Rehabilitation

Mission
- Creating appropriate atmosphere in order to development and empower students who will be able and responsible towards the society and coordination of the real needs.
- Promotion of high quality training for students in areas such as increased population, etiological research in social inconsistency planning and interventions.
- Responding to requirements of demanders in social knowledge and rehabilitation. Finding the solutions for present scientific and informative failures in human sciences related to social welfare.
- Paying attention to establishment of norms, Standards and indicators. And compiling the evaluation and monitoring system in the relative affairs.

Goals:
- Training of adequate and appropriate necessary personnel to provide special and advisory services.
- Policy making in Rehabilitation and Social Welfare of the country with respect to promoting positive attitudes together with knowledge and skills.

Policies
Development of Postgraduate courses
Creating new interdisciplinary Courses ad “Demand-based” student admission
Holding Fundamental and Applied Research Projects according to NEEDS of Governmental and nongovernmental Sectors
Scientific-Educational Promotion of staff of Rehabilitation and Welfare sectors
Flexibility in plan and Execution of Education/research programs

Rehabilitation Sciences prepare practicing professionals for leadership roles in health-related disciplines. The program's courses develop:
- advanced knowledge of movement control and the basis for movement dysfunction,
- skills in measurement of impairment, functional limitations, and disability,
- Skills in research on movement dysfunction and the outcomes of rehabilitation, oral and written communication skills.

The program culminates in a research thesis or project on a topic of interest. Graduates of the program are prepared to engage in scientifically-based musculoskeletal or neurologic research, entry-level teaching or graduate study at the doctoral level.

Graduate students in rehabilitation sciences have access to faculty mentors with a wide variety of backgrounds in both basic and clinical sciences. In addition, there are the specialized clinical facilities with which the department maintains clinical affiliation agreements. Departmental laboratory facilities include a movement science laboratory, a clinical gait and motion analysis laboratory.
Departments
• Speech Therapy
• Physiotherapy
• Occupational Therapy
Study Programs

BSc

• Speech Therapy
• Physiotherapy
• Occupational Therapy

MSc

• Physiotherapy
• Sports Physiotherapy
School of Nursing and Midwifery

School of Nursing and Allied Medicine is one of the oldest schools founded in 1977 in Semnan University of Medical Sciences. It offers undergraduate programs leading to degrees in Nursing, OR, and Anesthesia, an entry level Master’s in Critical Care Nursing and Emergency Nursing, and postgraduate program in Nurse Education. Our mission is to prepare individuals to become competent caring health care providers. The goals include the following:

• Promoting the academic staff in educational, research, and clinical levels,
• Enhancing the role of the school in education and research in order to offer strategic plans at the national levels in nursing,
• Expanding collaboration with national and international research centers,
• Improving the educational and research services to promote the students’ knowledge,
• Expanding scientific information technology, and collaborating with national and international research centers,
• Promoting the role of the school in educational, training, and research affairs, and offering national approaches in nursing,

Departments

• Internal and Surgical Nursing
• Neonatal and maternal Nursing
• Health Information Technology
• Operation Room and Anesthesia
• Radiologic Technology
Study Programs

BSc
• Anesthesia
• Operation room
• Nursing
• Health information technology
• Radiology

MSc
• Critical Care Nursing
• Emergency Nursing

PhD
• Nursing Education
School of Health

The School of Health is one of the prestigious schools in Iran with over 10 staff and 100 students actively engaged in research and teaching across a wide range of topics, covering health education and community health improvement, environmental health engineering, occupational health and safety and epidemiology. Our integrated programs of study offer exciting opportunities to work alongside research leaders and to develop the skills and knowledge required by future decision-makers.

With access to several analytical laboratories, pilot scale facilities, and supporting expertise, the school provides services, ranging from one-off activities to long-term collaborations with the industry and other research organizations.

Departments

Department of Environmental Health

This department is one of the well-disciplined academic centers in the country in educating professionals in the field of environmental health engineering at BSc and MSc levels. Three main research areas cover all environmental parameters such as air pollution, water treatment, solid and liquid waste treatment in the rural, urban areas and industrial sectors and include environmental monitoring and bio-monitoring of the pollutants, health-environmental interaction of hazardous pollutants and development of advanced techniques for environment purification.

Department of Public Health

This department offers a wide range of courses and training programs to meet the needs of diverse people at BSc level. Our main goal is to develop people’s competence in the core areas of public health, educating them with the knowledge, skills, and abilities to become effective practitioners and researchers, to engage people in the development and translation of new knowledge to improve the effectiveness and efficiency of public health services and to promote collaborations with community partners and stakeholders to increase public health and foster their regional and global participation.
Department of Occupational Health

This department offers BSc. program in occupational health engineering. Our mission is to prepare students to anticipate, recognize, evaluate, and manage workplace exposure to chemical, biological, and physical stressors and attain positions as industrial hygienists and occupational safety and health specialists. This is accomplished through a balanced mix of didactic and laboratory courses, field experiences, and directed research. Research areas include: Evaluation and control of chemicals, biological, and physical hazards in the workplaces, Ergonomics studies, evaluation and control of indoor hazardous pollutants, ionizing and electromagnetic radiation, toxicology and industrial ventilation.

Facilities and Laboratories:

There are a number of well-equipped laboratories within the school including safety and ergonomics lab, thermal conditions and ventilation system design lab. Equipments include GC/MS, GC/FID, HPLC/UV/F, CHNS/O element analyzer, and AAS. Microbiological and molecular base analysis (PCR) and varieties of sample preparation techniques are also available.
Study Programs

BSc
  - Public health
  - Occupational health
  - Environmental health

MSc
  - Environmental health
School of Allied Medical Sciences

School of Allied Medical Sciences as the first institution of higher education as paramedical sciences in Sorkheh was inaugurated in 2006 under the School of Nursing and Allied Medical Sciences in Semnan. Then in 2012 the School of Allied Medical Sciences in Sorkhe was promoted to admit students in non-straight BSc degree in emergency medicine and anesthesiology.
Study Programs

Straight and non-straight BSc degree in Emergency Medicine
Straight and non-straight BSc degree in Anesthesiology
Straight and non-straight BSc degree in Operation Room
Bsc degree in Radiology
Bsc degree in Health Information Technology
Along with the development of education and the expansion of academic centers in the city of Garmsar and Aradan, School of Health and Allied Medical Sciences was established in 2011 in Aradan. The school building was donated by Mr. Pazoki to Semnan University of Medical Sciences. At first the school admitted students in the fields of environmental health and public health in October 2011 and in February 2012 it began to accept students in medical emergencies. In 2014, the fields of Nutrition and Food Sciences (the branch of quality control and hygiene) were added to the school and the School of Public Health was renamed into the School of Nutrition, Food Sciences and Allied Medical Sciences started students in these fields.

**Study Programs**

**BSc:**
- Nutrition
- Food Sciences
- Medical Emergency
Microbiology Lab

Chemistry Lab
Research Centers

- Neuromuscular Rehabilitation Research Center
- Physiology Research Center
- Stem Cells in the Nervous System Research Center
- Abnormal Uterine Bleeding Research Center
- Social Determinants of Health Research Center
- Nursing Care Research Center
- Cancer Research Center
Neuromuscular Rehabilitation Research Center

The center covers an area of approximately 500 square meters with various sections including Electro diagnostic laboratory, Ultera sonography motion analysis, Isokinetic evaluation, Exercise physiology, library, conference hall, computer units, and administrative office.

Central Laboratories

Motion analysis laboratory

Location: Neuromuscular Rehabilitation Research Center

Date of Establishment: 2009

Specialized Equipments: 7 infrared cameras recording the three-dimensional motion, force plate measurement, the system which records the electrical activity of muscle electromyography with 8 channels, high-speed video camera, 64-channel analog to digital system and computer to synchronize the received-signal from the force plate, 7 infrared camera and 8-channelEMG system.

Research or Educational Use

In the education system, the capabilities can be used for learning how movements and muscle activity during movement and weight distribution below the surface contact of the foot. In research, it is used in more advanced features to assess the movements of the limbs, trunk and spine, especially walking pattern after rehabilitation interventions in cardiovascular, neuromuscular, musculoskeletal, and neurological problems.

In education and treatment, the force plate system is used to train the patients how to bear the weight on their legs. The system has the ability to modify the model of weight bearing on the lower limbs.

Neuromuscular Electro Diagnostic Laboratory

Location: Neuromuscular Rehabilitation Research Center

Date of Establishment: 2002

Specialized Equipments: two-channel EMG and electro-neurographic device (Key, point model, Dan-tech., factory).

Research and educational applications: Recording and measurement and evaluation of neuromuscular electrical signals, including signals including insertion activity, Spontaneous activities and interference pattern in muscle electrical activity during voluntary contraction, as well as evaluating the performance of Neuromuscular via Repetitive stimulation methods and investigating the electrical conduction of sensory and motor nerves and somatosensory evoked Potentials to investigate the function of neural systems of visual, auditory and sensory nerves. These signals can be used to detect the pathologic conditions including neurological and myogenic or myogenic ones. The capabilities of this device can be used to determine the changes of speed of electrical conduction of in motor and sensory nerve.

Muscular Ultrasonography and Sonography Biofeedback Laboratory

Location: Neuromuscular Rehabilitation Research Center

Date of Establishment: 2010

Specialized Equipment: ultrasound apparatus Honda, 2100 model, Convex probe and the examination table.

The Usage of research, education and treatment:

1) Ultrasonic photography to determine the changes in muscle size to assess the effects of the different exercise and to determine the best protocol therapy,

2) Muscular biofeedback and training the contraction on deep muscles in cases of neuromuscular disorders, skeletal and correcting the postures with deficiency.

3) Opening the muscular sonographic biofeedback training unit for students.
In education, the system is used to show the deep muscle contractions and muscle activity during movement, especially the spine, hip and shoulder movements. Also, the biofeedback methods of muscle performance are presented for students practically.

The lab can be used in research to determine the exact cross-section muscles before and after exercise therapy interventions, and thus the best exercises for different muscles are examined. The other is using this system to correct the faulty postures through the muscles functional training.

Exercise Physiology Laboratory
Location: Neuromuscular Rehabilitation Research Center
Date of Establishment: 2009
Specialized Equipments: Exercise Physiology System includes exercise physiology kit PTK14, ergometric treadmill and bicycle

Research and educational applications:
In laboratory, the amount of O2 and CO2 consumption is calculated during doing exercise and also the rate of metabolic activity. These measurements can be used to assess the efficacy of the methods and exercise interventions for cardiovascular, respiratory diseases and diabetes.

This lab will help the students are familiarized with concepts of metabolic activity during exercise and breathing O2 And CO2. They can observe the increase of heart and respiration rate and changes in respiratory gases and increasing the metabolism during doing exercise and after exercise returning these changes to the normal status.

Dynamic and Static Balance Laboratory
Balance System SD
Location: Neuromuscular Rehabilitation Research Center
Date of Establishment: 2010
Applications of research, education and treatment: The accurate assessment of neuromuscular balance by quantitative measurement of the ability to maintain the balance in standing status on one leg or two legs on a fixed or removable surface. To determine the state of equilibrium, four different tests are used are as follows:
1) The assessment of falling risk
2) The ability to control the balance of the athletes standing on one leg
3) To determine the scope of balance
4) To determine the balance of the individual's status

This measure allows us to evaluate how to use the precise and developed potential of the system to evaluate the balance control strategies after all interventions in patients with cardiovascular disease, neuromuscular, musculoskeletal problems and neurological disorders.

This system is also used for educational purposes to strengthen the motor capabilities to control balance during damage to mechanisms of Reflex proprioception in trauma.

Research Projects
1) The effect of vibration on the parameters of delayed muscle soreness (done)
2) Effect of deformities of genuvalgom and genovarum on the balance indicators among young girls (done)
3) The effect of stabilization exercises on the size of multifidus muscles and balance indicators (done)
4) The effect of vibration on the treatment of osteoarthritis of the knee (done)
5) A review of the indicators of isometric and isokinetic contractions among young boys (done)
6) The effect of short and long-term stretching exercises on balance indices (done)
7) Comparison of eccentric and concentric exercises in patients with type 2 diabetes (in progress)
8) Comparison of stability training and strengthening exercises in patients with saliency head (in progress)
9) The effect of anthropometric characteristics of young girls on the indicators of balance (in progress)

**Physiology Research Center**

The main goal of Physiology Research Center activities are as follows:

1- Neurobiology of learning and memory, using behavioral and electrophysiological techniques.
2- Acute and chronic stress effects on cognitive functions (learning and memory)
3- Behavioral, histological and molecular studies of chronic stress and related psychological disturbances
4- Cerebral ischemia and edema and therapeutic methods
5- Cardiovascular studies of high blood pressure and herbal therapeutic effects
6- Neuropathic pain studies
7- Drug dependency (opium) and non-medicinal treatments (physical exercise therapies)

The center is equipped with research laboratories, space for breeding and maintenance of animals (mostly rodents), a meeting room and student room for internet access. Some of the research labs in this center have cooperation with the main research institutions in the country and also have affiliation to National Cognitive Organization unit of governmental deputy of research.

**Learning and memory Laboratories**

The main research activities in these labs include: electrophysiology and Behavioral studies.

**A- Electrophysiological Recording Lab.**

The principal research interest of this laboratory is to understand the cellular / neurophysiological mechanisms underlying neuronal function with focus on the critical role of the hippocampus and other brain areas in neuronal plasticity. Also we focus particularly on a remarkable form of synaptic plasticity known as long-term potentiation or LTP on hippocampus, single unit recording and field potential from brain nucleus, which are involved in processes of learning and memory.

**Lab facilities and instruments**

Oscilloscopes, Microelectrode amplifiers, Stimulators, Steriotaxic and Brain Vibroslices and so on.

**B- Behavioral Laboratories**

The main goal of this lab is testing the effects of environmental, physical and pharmacological agents on various aspects of cognitive functions in experimental animals including rats and mice. We use different models for testing the spatial and non-spatial (classical and inhibitory conditioning) memory and anxiety. These methods are as following:

- Auditory Fear conditioning task
- Passive Avoidance task
- T maze
- Fear conditioning task
- -Morris water maze
- Elevated plus maze
- Motor movement measurement
Current research projects:

- Studying the effect of voluntary exercise and crocin on cognitive and behavioral impairments induced by juvenile chronic stress in adult male rats
- Investigating the effects and potential mechanisms of the protective effects of acute morphine administration on Posttraumatic Stress Disorder (PTSD) in an experimental model
- Studying the role of pre and infra limbic of prefrontal cortex and glucocorticoid receptors on retrieval and extinction memory in fear conditional model in rat: Behavioral, Biochemical, Histological study
- Studying the interaction of cannabinoid and glucocorticoid receptors in Infraorbital of prefrontal cortex, CA1 of Hippocampus and Basolateral amygdala on extinction memory in fear conditional model in rat
- Studying the therapeutic effects of spirulina microalgae, voluntary exercise and environmental enrichment on cognitive-behavioral impairment, structural, molecular and electrophysiological changes induced by juvenile stress in adult female rats

Cardiovascular & Hypertension Lab

We produce hypertension by Goldblatt method:

Animals anesthetized with ketamin-xylocine the left kidney exposed and a silver clip with internal diameter of 0.2 mm placed on the kidney’s artery and sutures the surgery site. One month later, hypertensive rats are anesthetized with pentobarbital sodium and placed on the rat temperature unit to maintain a constant rectal temperature of 36.5 ±0.5 °C. Femoral vein is cannulated for extract injection. Femoral artery also is cannulated with a heparinized cannula that connected to a pressure transducer for continuous measurements of arterial BP and heart rate.

Some of our research subjects are as following:

- Evaluating the effect of Teucrium polium extract (oral) on high blood pressure in rat model of renovascular hypertension: Goldblatt method (worked as a Master’s student thesis project)
- Evaluating the therapeutic effect of Grape seed extract on high blood pressure induced by lead Poisonous in the rat
- Evaluation effect of Ferula persicaand Viscum album on hypertension (Master’s student project)
- Evaluation effect of medical plants on hypertension associated with diabetes mellitus (medical student research project)
Neurophysiology Simulation (Action potential, NCV and EMG) Research Lab

The neurophysiology simulation research lab is engaged with electromyography (EMG), nerve conduction velocity (NCV) and Action potential experiments.

EMG involves inserting a fine needle into a muscle to compare the amount of electrical activity present when muscles are at rest and when they contract. EMG tests can help differentiate between muscle and nerve disorders.

NCV tests can precisely measure the degree of damage in larger nerve fibers, revealing whether symptoms are being caused by degeneration of the myelin sheath or the axon. During this test, a probe electrically stimulates a nerve fiber, which responds by generating its own electrical impulse. An electrode placed further along the nerve’s pathway measures the speed of impulse transmission along the axon. Slow transmission rates and impulse blockage tend to indicate damage to the myelin sheath, while a reduction in the strength of impulses is a sign of axonal degeneration.

The primary goal of our research is to identify new drugs for treating some kinds of neuropathies. One of the subjects of our investigations is:

The effects of progesterone on neuropathic pain responses in an experimental animal model for peripheral neuropathy in the rat: a behavioral and electrophysiological study.

Wound healing Lab

Wound healing, is the body’s natural process of regenerating dermal and epidermal tissue. Plants and their extracts have immense potential for treatment of wounds.

Our research labs been focused on treatment of wounds by medicinal plants and folk remedy. Animal models of wounds can be great help for research of therapeutic strategies. The wound healing lab has facilities such as: Surgery suite – small animals (guinea pigs – Rat – and rabbit), general and local anesthesia, individual housing, planimetry analysis for measuring wound contraction, histological measurements of wound healing and biomechanical characteristics of wound (in related departments).

Motor Coordination Lab

The Motor Coordination Laboratory is designed for the study of neurophysiological and biomechanical factors in rat motor control. The laboratory is equipped with a variety of equipments such as rotarod, beam walking and a new designed apparatus. The rotarod test is used to assess motor coordination and balance in rodents. Rats have to keep their balance on a rotating rod. It measures the time (latency) which takes the rat to fall off the rod rotating at different speeds or under continuous acceleration (e.g. from 4 to 40rpm).

Laboratory of Animal Addiction Models

The Laboratory of Animal Addiction Models was established at the physiology Research Center. So far, different models of drug dependency (morphine, methamphetamine) and tolerance to analgesic effects of morphine and Conditioned place preference (CPP) were conducted in this laboratory. My main re-
search interests include the evaluation of exercise (Voluntary running wheel, Treadmill, Swimming), environmental enrichment and also herbal medicine on drug abuse-induced cognitive, behavioral deficits, such as; Learning and memory, Behavioral withdrawal signs, grooming behaviors, (OCD), anxiety, voluntary drug consumption using a two-bottle choice paradigm (TBC), behavioral sensitization, the neurobiological mechanisms underlying drug addiction, Brain BDNF, apoptosis-associated proteins, hippocampus neuron counting and so on. I have supervised several theses of graduate and medical students. Meantime, there are two Masters and two PhD students working in this laboratory. In near future, human studies of addiction is planned to be pursued by my lab.

Stem Cells in the Nervous System Research Center

The center is located in the 5Th km of the road of Semnan-Damghan and in the university campus. It has various sectors including laboratories of extraction and isolation of stem cells, cultured and passaged cells and tissues, microinjection, immunohistochemistry and immunofluorescence, histotechnology and histomorphometry, conference hall and library. It works in the various fields of stem cells and molecular cell biology. The professors of this center cooperate with the post graduate students in the research projects in the field of embryonic and adult stem cells, embryo culture and cellular molecular biology.

Goals

1) Development and application of human knowledge in the field of stem cell sciences, especially in the area of the nervous system
2) To carry out the basic and clinical epidemiologic research to reform the country’s health care system to meet the needs of the Muslim community
3) Training the efficient researchers on the field of stem cells
4) To promote the quality and quantity of researches related to the basic medical sciences and directing them towards the challenges in treatment
5) Having attempt to collaborate with the research centers throughout the country
6) Scientific cooperation with research and educational centers of countries and international organizations considering the laws and regulations of the Islamic Republic of Iran
7) To encourage the researchers in the field of stem cells
8) To gather, compiling and classifying the documents, data, papers and related documents to publish them

These activities are conducted to expand the frontiers of knowledge, innovation and setting up new methods of research, expansion of scientific cooperation with other centers both inside and outside the country and with national priorities in the field of training the skillful people to create the conditions for scientific and economic development.

Activities

It works in two areas including stem cells, neurobiology, cell and tissue culture, tissue engineering, metabolic and neurodegenerative diseases, immunohistochemistry and molecular biology, biology of fertility and infertility and training the efficient human resources.

**Abnormal Uterine Bleeding Research Center**

**Research priorities**

1. To compare the Metoformin and Clomiphene with placebo and Clomiphen to induce ovulation in patients with polycystic ovarium with resistance to insulin
2. The relationship of the probability of Corticosteroids injection into the joint and abnormal uterine bleeding at the ages of Menopause
3. The effect of Trans-Exomic Acid on the bleeding after delivery
4. The comparative investigation of the therapeutic effect of Megestroleasetat with Letrozole in the treating the endometrial hyperplasia.
5. The effect of Letrozole in treating the uterine Myoma in women at the ages of Pre-Menopause
6. Comparison of the Rate of AUB prevalence and bleeding patterns in overweight patients without PCOS with women having the normal weight
7. Comparison of AUB prevalence and patterns of bleeding in patients with overweight and obese patients (BMI> 30)
8. To investigate the Psychological status of patients with hysterectomy due to abnormal bleeding in uterine
9. To investigate the causes and patterns of abnormal bleeding in uterine at the ages of adolescence
10. To investigate the Prevalence and patterns of abnormal bleeding in uterine in patients with disorders in thyroid gland
11. To investigate the consequences of pregnancy and some risk factors in patients with bleeding in the second and third last three months with the diagnosis of Placenta previa
12. To investigate the of histopathologic findings of the endometrial diagnostic curettage in patients with abnormal uterine bleeding
13. To investigate the clinical symptoms and pathological reports of gynecologic pelvic masses
14. To investigate the quality of life in patients with abnormal uterine bleeding
15. To investigate the depression in IVF infertility patients referred to Imam Ali Hospital in Semnan
16. Comparison of suppository Misoprostol with Transegzamic acid in preventing bleeding after elective cesarean
17. To investigate the histopathology results of endometrial polyps after hysterectomy in some of the possible risk factors
18. To investigate the effect of oral Metformine in treating the proliferative disease of endometrium
19. To investigate the consequences of the next pregnancy following the ectopic pregnancy (re-EP infertility)
20. To investigate the effect of mulyze during the laparoscopic surgery on the size of myoma and the symptoms in patients with uterine fibroids bleeding
Social Determinants of Health Research Center

Social Determinants of Health (SDH), such as nutrition, environment, work environment, poverty, education, social class, housing, water, sex, unemployment, stress, income, social support, education are the most important social determinants of health and cause diseases compared with biological agents and play the key role in human’s health and if they are ignored to achieve the goals of health and justice will be impossible. These factors cause more than 50% of diseases and mortality rate in the world. Based on the available evidences, the major health inequities result from the asymmetric consequences of social factors on the health of people. If there are deep inequalities in health, we have no favorable world for human beings. Evidence suggests a profound impact on the social determinants of disease and to achieve a humane society and to reduce the gap in health disparities, the social determinants of health should be considered as key points.

The study of each of these factors and understanding the relationships between them is the World Health Organization’s objectives. During the last decade, the scientific information related to social determinants of health has improved dramatically and today the political conditions have been provided to do this compared to the last decade. This opportunity is too important to be neglected. To achieve these objectives a management is required to master the relevant knowledge, and the necessary political consciousness along with the moral attitude. Therefore, the Commission of the social determinants of health in the international health organizations has been established. Scientific understanding of the social determinants of health has made the rapid progress in recent decades. In many countries, this scientific evidence is used to compile the new solutions for general policy making. Islamic Republic of Iran, as one of the leading countries in combating the adverse effects on the social determinants of health since 2006, coinciding with the start of the World Health Organization’s Commission on Social Determinants of Health, established the secretariat of Social Determinants of health in the Ministry of health and Medical education.

Objectives

1- Identify the research priorities of community in order to carry out the necessary interventions
2- Carrying out the scientific research in order to identify the social factors associated with diseases
3- Conducting the Research interventions in order to achieve to a healthy lifestyle
4- Carrying out the scientific research in order to identify the false attitudes associated with health
5- Conducting the research interventions to change the false attitudes associated with health
6- Reducing the health inequalities through improving the status of people’s knowledge
7- Intervention to reduce the health risk factors associated with lifestyle such as smoking, bad habits in diet and lack of physical activity, etc.
   - To publish the scientific articles, compiling the books on the area of the activities of center to enhance the community knowledge
   - To train the Researchers through holding workshops
   - To hold the scientific lectures to raise the community knowledge
   - To communicate with internal and external research centers to enhance the human’s knowledge
   - To publish the Journal in accordance with the objectives of the center to enhance community knowledge
   - To attempt towards the objective of research
   - Efforts to promote the center to obtain the absolute agreement for independent budget within the next three years

Strategies

The mission is going to promote the research capacity via the inter-section and intra-section collabora-
tions in the field of social determinants effective on health and achieve the health equity in the country's development plans. In addition, to participate the community and non-governmental organizations for community education and providing practical models to promote the health behaviors are the other measures which are going to be performed. Other missions are to develop the management of research on the social determinants of health equity, upgrade the quantity and quality of research in the field of social determinants of health equity, promotion of research on priority social determinants of health to increase the public participation and the development of capabilities and skills of individuals to modify lifestyle and improve its quality and reduce the causes and socio-economic inequalities on the health-based development, collecting the documentations and general evidences of health inequalities; to explain and evaluate health inequalities in physical and mental condition, to explain and assess the social health inequalities, to determine the health status in social groups, creating a registration system of SDH studies, education, income security, social support and social capital, health system, lifestyle and living conditions are the other factors which need to be carried out in future.

Nursing Care Research Center

Nursing Care research center was established in 2010 and obtained a preliminary approval of the Vice Chancellor for Research and Technology of Ministry of Health, Treatment and Medical Education in July 2015.

Mission

Nursing care research center have been established to develop qualitative and quantitative research in the field of nursing and care at the local, regional, national and international level. This center works in the field of education and research in domains of prevention, treatment, nursing care and rehabilitation. The main activities of center were included:

- Ethics in research,
- Maintaining the dignity and rights of human beings,
- Producing and promoting of nursing knowledge,
- Supporting for new research and applications in the field of nursing,
- Performing high quality and targeted research activities,
- Training efficient researcher resources in the field nursing,

Helping to improve the health of patients and the health of the community.

The mission is to facilitate the research enhancement of nursing profession. This research will be developed in individual, family and society dimensions that focused on public health care, acute and emergency services. Also, diversity of research in the application of technology in education and nursing care, training programs, researching empowerment, publishing books and journals, and contracting work with other professions for a scientific synergy purposes are other activities of research center.

Objectives

- Performing high quality research in nursing care domain
- Recruitment of nursing researchers
- Training expert manpower for scientific and research activities
- Attempt to utilizing research findings for clinical settings
- Development of nursing care knowledge
- Creating an appropriate context to cooperate with other national and international research centers
- Facilitate the preparation of high quality research proposal
- help researchers throughout the research process such as data collection, data analysis, and scientific writing
- Development research culture in all branches of nursing

Research Projects

1. Depression, anxiety and stress and their relation to the level of vitamin D and estrogen in menopausal woman in Semnan
   - Executive Director: Nemat Sotodehasl ; Mohammad Abdoli-Zaker

3. Comparing the Effect of Pre-operative and Post-operative Supplemental Fluid Therapy on Severity of Post-operative Nausea and Vomiting (PONV) and Pain in Patients Undergoing Breast Cancer Surgery.
   - Executive Director: Mohsen Soleimani ; Mohammad Mohammadi; Homan Tymorian

4. Medical patient’s transferring risk classification from intensive care units
   - Executive Director: Abbasali Ebrahimian ; Hossein Ghasemian-Nik ; Ali Fakhr-Movahedi

5. Survey the effect of valerian on sleep quality, anxiety and depression in patients undergoing hemodialysis
   - Executive Director: Monir Nobahar ; Zeinab Hydarinia ; Abbasali Ebrahimian

6. Compare the effect of topical and oral flaxseed-oil on pruritus severity of hemodialysis patients
   - Executive Director: Mohsen Solimani; Seyedeh Rahime Nabavi; Abbasali Ebrahimian; Nadia Karimi

7. The comparison of tracheal tube close and open suction on severity of pain and physiological indicators in under mechanical ventilation traumatic brain injuries patients
   - Executive Director: Ali Fakhr-Movahedi; Samane Azizi; Abbasali Ebrahimian

8. Effect of body position on chest pain severity and physiologic parameters in patient with unstable angina in Erfan hospital of Tehran city
   - Executive Director: Ali Fakhr-Movahedi; Samane Azizi; Abbasali Ebrahimian

9. The effect of valerian (Sedamin) on cognitive disorders in patients undergoing hemodialysis
   - Executive Director: Monir Nobahar; Zeinab Hydarinia; Abbasali Ebrahimian

10. Comparing the effect of local coldness, heat and intermittent cold - heat application on chest pain severity during respiratory exercise in patients after open heart surgery
    - Executive Director: Ali Fakhr-Movahedi; Abbasali Ebrahimian; Afsane Zaree; Kamran Ghods

11. The effect of acupressure on the clinical manifestations of Carpal Tunnel Syndrome (CTS)
    - Executive Director: Mohammad-Reza Askari; Saeedeh-Sadat MusaviNejad; Parviz Ahangar ; Abbasali Ebrahimian; Hassan Babamohammadi; Atefe Aminian; Raheb Ghorbani

Cancer Research Center (CRC)

Introduction
Cancer is one of the main causes of mortality in the world. Cancer after Cardiovascular disease is the second and common cause of mortality in the developed countries and is the third one in the less developed countries; it kills people more than the diseases such as tuberculosis, AIDS and malaria. If the preventive measures are not taken in the next 10 years, more than 85 million people will die. In Iran, it is the third cause of mortality and every year more than 30,000 people lose their lives due to cancer. By increasing life expectancy, the elderly people, medical technology, and lack of having the healthy life and clean environment; being industrial pollutants and carcinogens, it is expected the incidence of cancer is doubled during the next two decades. As predicted by the World Health Organization, the number of cancer cases will be reached to 86000 until 2021 in total population and the mortality rate resulted from cancer will be approximately 63,000, so the particular attention should be paid.

The Cancer Research Center in Semnan University of Medical Sciences has provided a comprehensive strategic plan at the basic and clinical cancer problem throughout the country. It also reviews the activities of research centers in previous years and designs a new process, and organizes all projects in basic, clinical, epidemiological and demographic studies about cancer.

Cancer Research Center was established on 26th March 2014 and it was awarded the approval from the
Deputy of Research and Technology; Ministry of Health.

**Mission:**

The fight against cancer is the aim of any research center. CRC hopes, researchers can eradicate cancer through cooperation by using the latest scientific achievements in basic and clinical sciences and the components of cancer control (prevention, diagnosis, treatment, palliative care-rehabilitation). It is hoped that the CRC can conduct the fundamental research in the fields of epidemiology, biology, diagnosis and treatment of cancer and promotes the scientific and practical knowledge of all members of CRC in order to provide the best services of diagnosis and treatment of cancer. Also, we hope that it can take the steps to reach the overall goal, to improve the knowledge of cancer and cancer-related questions.

**Objectives:**

**The general goal:**

**Improving the knowledge about cancer**

**Quantitative Goals:**

1. Promoting the understanding level of cancer epidemiology
2. Promoting the understanding of the epidemiology of the common cancers in the world and in Iran
3. Promoting the level of etiologic factors of cancer
4. Promoting the ways of reducing the prevalence of cancer
5. Promoting the knowledge level for cancer treatment
6. Improving the patient's quality of life during the proven stage, before and after treatment
7. Educating people through healthy nutrition, avoidance of risk factors, yearly diagnostic tests, regular screening and follow-up for diagnosis and treatment
8. Promoting the medical knowledge about cancer at the medical universities across the country

In order to achieve these goals, doing the extensive research to identify the risk factors and inhibitors of cancer, identifying the effective factors on the early diagnosis, treatment and also training related to how to care the patients and general trainings for community are necessary. The main duty of CRC is to collect the academic resources and concentrating them for future decision-making. CRC in Semnan University of Medical Sciences also identifies the research areas in consultation with the academic professors and will present the executive and research strategies effective in reducing mortality rate resulted from cancer and new cancer treatment methods.

Research and future plans which is being implemented by Cancer Research Center

Semnan University of Medical Sciences Cancer Research Centre is going to do over a 5-year program (2014-2019) and to conduct ten research projects along with publishing twenty papers in prestigious journals throughout the world.

Implementing the registry of CRC is on the basis of the agreement signed with the Deputy of Research at Cancer Research Center in Cancer Institute on the order of the Research and IT Deputy at Ministry of Health. Hospital cancer registry system is an organized collection which gathers the clinical uniform information on the basis of the different methods of observation and the clinical information related to each group of the kinds of the common cancers are registered in the standardized and similar forms and is being currently implemented in a limited number of provinces.

Implementing the Public education program about breast cancer and breast cancer screening in Semnan.

**Members of the CRC:**

Founding Members at Cancer Research Center include:

- Parviz Kokhaei (Head of Centre), PhD, Professor of Immunology
The other future plans and follow-up programs include:

- Admitting the PhD student by research at CRC
- Public education on cancer; prevention, Diagnosis and treatment

Other members of the CRC:
- Sabahat Haghi, MD, Assistant professor in Hematology and Oncology
- Bahador Bagheri, Assistant Professor in Pharmacology
- Mohssen Purazizi, Resident in Ophthalmology
- Jafar Allawi Tousi, pathology researcher
- Abdolkarim Sheikhi, Professor in Immunology

Officers at CRC:
Mehrnoush Pashaie, MSc. in Immunology
Hospitals

- Kowsar Hospital
- Amiralmomenin Hospital
- Motamedi Hospital
- Velayat Hospital
- Imam Hossein Hospital
- Panzdah-e-Khordad Hospital
**Kowsar Hospital**

Established in 2012, Kowsar Hospital is one of the most equipped hospitals in Semnan Province. The main goal of the Hospital has been medical research as a fundamental issue along with training residents in internal medicine and treatment.

The hospital consists of internal ward including neurology, nephrology, rheumatology, infectious diseases, lung diseases, cardiology, oncology, gastroenterology, dermatology, glands, cancer diseases, emergency medicine, peritoneal dialysis, ICU, and CCU, and Surgical ward that is composed of general surgery, neurosurgery, ENT, orthopedia, ophthalmology, thoracic surgery, open heart surgery, and urology. There also exist some clinics with modern facilities and competent specialized staff. The clinics are: ophthalmology clinic, diabetes clinic, oncology clinic, ICU for open heart surgery, and urology clinic.

Ophthalmology Clinic: Pentacam, laser, PRP (Argon Laser), PI Laser, A-Scan, and B-Scan.

Oncology clinic: chemotherapy

ICU for open heart surgery: angiography and angioplasty

Urology clinic: ESWL, TUL, PCNL, PCCL, Laparoscopy and Endourology Operation.
Amiralmomenin Hospital

Amiralmomenin Hospital was established in 1988. The hospital by using the appropriate and valuable experiences of its committed and industrious directors, physicians and staff has managed to make great strides in the health and treatment in Semnan Province. It also aims to train competent and committed residents in the fields of Pediatrics and Obstetrics & Gynecology.

The hospital consists of Pediatric Ward including pediatrics endoscopy, pediatrics colonoscopy, chemotherapy, Thalassemia, Hemophilia, oncology, pediatrics echocardiography, pediatrics allergy, and asthma, Spirometry, Neonatal ICU, and Obstetrics & Gynecology Ward that includes LDR room, abnormal uterine bleeding research center, IVF, and Delivery ICU.

Moreover, in Gynecology and Obstetrics Clinic, the hospital offers it services:

- IVF
- Microinjection
- Freezing the fetus
- Freezing the spermatozoid
- Transferring the fetus after IVF
- TESE and PESA
- IUI
Welfare Facilities

Housing
Since a great number of SEMUMS students come from the provinces, the University undertakes the responsibility of providing them with proper accommodation through the Office of Vice-Chancellor for Culture and Student Affairs. Currently, dormitories for boys and girls, and one for married couples house all applicants coming from different fields of study and levels from different parts of Iran. There are such recreational and welfare facilities as reading chambers, book storage, a mosque, an auditorium, a gym, a movie hall, and etc.

Food Services
Meals are prepared under the supervision of the University's health and nutrition experts. Self-Service restaurants at the faculties and dormitories supply the students with different meals at low prices. The schools' cafeterias also serve the students during the day.
Physical Education

Among other activities, physical education is organizing employee and student's tournaments at university and national levels.

Measures are taken by the physical Education Department of the office of Vice-Chancellor for Student Affairs to improve the quality of sports for the staff, students, faculty members, and their families. Some of the University's sports facilities are as follows:

• 16 Azar-Sport Complex

This complex includes a gymnasium for basketball, volleyball, futsal
• Swimming Pool
Swimming pool, Jacuzzi pool, spa
- Tennis courts
- Fitness gym
Cultural Activities

The Directorate for Cultural and Social Affairs attempts to discover and help fostering hidden talents of the students in order to develop their culture and thoughts. These extracurricular activities aim at helping students become self directed, efficient, and responsible citizens in the society.

Other activities of the Office:

- Managing sight-seeing, pilgrimage, and scientific tours,
- Conducting cultural-art competitions,
- Supporting student associations,
- Supporting of student journalizing activity,
- Holding and participating at different cultural exhibitions,
- Student cultural council office,
- Quran activities

Physical and Mental Health

Student Health Care Center: To provide the students with a healthy environment which is quite essential for proper education, the Student Health Care Center uses services of experienced university instructors at general, specialized, dental, and vaccination clinics. In case of any need for more medical care and treatment,

Students will be sent to the affiliated hospitals. Upon admission to the University, a medical record file indicating health status and problems is made for every student. Using the same files and health cards, students can refer to the University's associated Health Care Centers.

The Student Counseling Center: Licensed psychologists and social workers provide various services. Other areas of assistance include emotional attitude, behavioral problems, social skills, proper decision making, marriage counseling, family problems, financial issues, workshops and training courses on learning skills, concentration, memory, study skills, educational problems, correspondence counseling with students' families, and giving educational and psychological speeches.