جامـعة البـلقاء التطبيقيــة

كليـــة الطـــــب

Al-Balqa Applied University

Faculty of Medicine

Study Plan Structure: Bachelor Degree in Doctor of Medicine (M.D.)

Name of the Degree: Doctor of Medicine (M.D.)

The modified study plan qualifying student to obtain a Bachelor's degree in Doctor of Medicine (M.D.). This study plan is to be applied to students admitted to the Faculty of Medicine as of the academic year 2025/2026. The distribution of courses and credit hours for being eligible to be awarded the M.D. degree will be as follows:

Components of the Study Plan:

The study plan of the Doctor of Medicine **(M.D.)** is composed of (260) credit hours distributed as shown below:

First	University Requirements	**24** Credit hours
Second	Requirements in Basic Sciences	**14** Credit hours
Third	Requirements in Basic Medical Sciences	**94** Credit hours
Fourth	Requirements in Clinical Sciences	**128** Credit hours
Total		**260 Credit hours**

First: University Requirements.

(24) Credit hours distributed as shown below:

A- Obligatory University Requirements: (18) credit hours consisting of:

Course No.	Course Name	Prerequisite	Weekly Teaching Hours		Credit Hours
			Theory	Application	
60000113	Applied Arabic Language	-	**2**	**1**	**3**
60000122	Applied English Language	-	**2**	**1**	**3**
60000124	Artificial Intelligence Applications	-	**1**	**1**	**2**
60000116	Military Sciences	-	**3**	**-**	**3**
60000115	National Education and Social Responsibility	-	**2**	**1**	**3**
60000121	Innovation, Entrepreneurship	-	**1**	**1**	**2**
60000123	Life and Work (Soft) Skills		**1**	**1**	**2**
Total		**-**	**12**	**5**	**18**

B- Elective University Requirements:

(6) Credit hours, the student should choose from the below courses:

Course No.	Course Name	Weekly Teaching Hours		Credit hours
		Theory	Application	
61900121	Islamic Culture	**3**	**0**	**3**
61900122	History of Righteous Caliphs	**3**	**0**	**3**
60000111	Jerusalem (Palestinian Cause)	**3**	**0**	**3**
61400121	Sustainable Development	**3**	**0**	**3**
62008111	Introduction to Psychology	**3**	**0**	**3**
60304121	Electronic Crimes	**3**	**0**	**3**
60602111	Smart Agriculture	**3**	**0**	**3**
61405121	Digital Economy	**2**	**1**	**3**
60801121	Digital Media	**2**	**1**	**3**
60400111	Good Health	**3**	**0**	**3**
60300121	Introduction to Information Technology	**2**	**1**	**3**
61801111	Community Service	**3**	**0**	**3**
61801112	Social Problems	**3**	**0**	**3**
60604121	Water and Energy Sustainability	**3**	**0**	**3**

60206121	Sustainable Urban Planning	**3**	**0**	**3**
61401121	Introduction to Digital Business Management	**3**	**0**	**3**
62000111	Good Education	**3**	**0**	**3**
61406121	Digital Marketing	**2**	**1**	**3**
61400122	Industry and Innovation	**2**	**1**	**3**
60306121	Introduction to Cyber Security	**2**	**1**	**3**
60000118	Traffic Safety	**3**	**0**	**3**
61501121	English Conversation	**1**	**2**	**3**
61500121	German Conversation	**1**	**2**	**3**
61500122	Chinese Conversation	**1**	**2**	**3**
61500123	Spanish Conversation	**1**	**2**	**3**

Note:

- All students must pass the placement exams in Arabic Language, English Language and Computer Skills. Who fails in any of these exams should register for remedy courses outside the study plan.

Second: Faculty Requirements.

(236) obligatory credit hours distributed as shown below:

A. Requirements in Basic Sciences. **(14)** Credit Hours

B. Requirements in Basic Medical Sciences. **(94)** Credit Hours

C. Requirements in Clinical Sciences. **(128)** Credit Hours

A- Requirements in Basic Sciences.

(14) Credit hours including the following courses:

Course No.	Course Name	Weekly Teaching Hours		Prerequisite	Credit Hours
		Theory	Practical		
71603135	General Biology	**3**	**-**	-	**3**
71603137	General Biology/Practical	**-**	**1**	71603135	**1**
71606151	Organic Chemistry for Medical Students	**4**	**-**	**-**	**4**
71605136	Medical Physics	**3**	**-**	-	**3**
70403281	Artificial Intelligence in Medicine	**2**	**1**	-	**3**
Total		**12**	**2**		**14**

B- Requirement in Basic Medical Sciences.

(94) Credit hours including the following courses:

Course No.	Course Name	Weekly Teaching/Training Hours		Credit Hours
		Theory	Practical* (Lab/Clinical Training/Field Visits)	
70403131	Medical Terminology	**1**	**-**	**1**
70403132	Anatomy and Embryology	**2**	**1**	**3**
70403134	General Histology	**1**	**1**	**2**
70403146	Introduction to Biochemistry	**2**	**-**	**2**
70403158	Introduction to Microbiology	**3**	**-**	**3**
70403182	Health Informatics System (1)	**3**	**-**	**3**
70403184	Health Care Management	**2**	**-**	**2**
70403241	Biochemistry	**3**	**-**	**3**
70403233	Introduction to Physiology	**2**	**-**	**2**
70403274	Public Health	**3**	**-**	**3**
70403255	Introduction to Pathology	**2**	**1**	**3**
70403248	Principles of Genetics and Molecular Biology	**3**	**-**	**3**
70403279	Community Medicine	**3**	**-**	**3**
70403272	Epidemiology and Biostatistics	**3**	**-**	**3**
70403262	Cardiovascular System	**4**	**1**	**5**
70403264	Blood and Lymphatic System	**3**	**1**	**4**
70403266	Digestive System	**5**	**1**	**6**
70403257	Introduction to Pharmacology	**3**	**-**	**3**
70403357	Introduction to Medical Immunology	**2**	**-**	**2**
70403384	Health Economics and Policies	**2**	**-**	**2**
70402332	Behavioral Science	**3**	**-**	**3**
70403378	Principles of quality, patient safety, and infection control	**3**	**-**	**3**
70403361	Musculoskeletal System and Skin	**4**	**1**	**5**
70403362	Nervous System and Special Senses	**5**	**2**	**7**
70403363	Respiratory System	**4**	**1**	**5**
70403364	Genitourinary System	**5**	**1**	**6**
70403365	Endocrine System	**3**	**1**	**4**
70402376	Clinical Skills	**1**	**2**	**3**
Total in Credit Hours		**80**	**14**	**94**

***** Each practical hour equals 3 contact hours every week.

C- Requirements in Clinical Sciences:

(128) Credit hours including the following courses:

Course No.	Course Name	Clinical Training in Weeks	Credit Hours
70402471	Introduction to Clinical Medicine and Medical Ethics (1)	**4**	**4**
70402432	Medicine (1)	**10**	**10**
70402443	General Surgery (1)	**10**	**10**
70402434	Clinical Neurosciences	**3**	**3**
70402445	Orthopedic Surgery	**4**	**4**
70402446	Anesthesia and Intensive Care	**3**	**3**
70402467	Primary Health Care	**-**	**3**
70402561	Family Medicine	**4**	**4**
70402571	Introduction to Clinical Medicine and Medical Ethics (2)	**2**	**2**
70403582	Health Informatics System (2)	**-**	**3**
70402593	Introduction to Clinical Research	**-**	**3**
70402581	Diagnostic Radiology	**2**	**2**
70402551	Pediatrics (1)	**8**	**8**
70402582	Forensic Medicine and Toxicology	**1**	**1**
70402533	Psychiatry	**4**	**4**
70402554	Obstetrics and Gynecology (1)	**8**	**8**
70402545	Ophthalmology	**2**	**2**
70402546	Urology	**2**	**2**
70402547	Otolaryngology	**2**	**2**
70402538	Dermatology	**2**	**2**
70402569	Emergency Medicine	**2**	**2**
70402653	Pediatrics (2)	**8**	**8**
70402634	Medicine (2)	**8**	**8**
70402645	General Surgery (2)	**8**	**8**
70402656	Obstetrics and Gynecology (2)	**8**	**8**
70402691	Elective Clinical Training	**8**	**8**
70402692	Graduation Project	**-**	**6**
Total		**113**	**128**

Guidance Plan for Registration Purposes (Annual Plan):

First Year

First Semester		
Course No.	**Course Name**	**Credit Hours**
71603135	General Biology	**3**
71603137	General Biology/Practical	**1**
71605136	Medical Physics	**3**
60000124	Artificial Intelligence Applications	**2**
71606151	Organic Chemistry for Medical Students	**4**
70403131	Medical Terminology	**1**
	University Req. Course	**3**
Total		**17**

Second Semester		
Course No.	**Course Name**	**Credit Hours**
70403132	Anatomy and Embryology	**3**
70403134	General Histology	**2**
70403146	Introduction to Biochemistry	**2**
70403184	Health Care Management	**2**
70403182	Health Informatics System (1)	**3**
	University Req.	**2**
	University Req. Course	**3**
Total		**17**

Summer Semester		
Course No.	**Course Name**	**Credit Hours**
70403158	Introduction to Microbiology	**3**
	University Req. Course	**3**
	University Req. Course	**3**
Total		**9**

Second Year

First Semester		
Course No.	**Course Name**	**Credit Hours**
70403241	Biochemistry	**3**
70403233	Introduction to Physiology	**2**
70403255	Introduction to Pathology	**3**
70403279	Community Medicine	**3**
70403257	Introduction to Pharmacology	**3**
70403281	Artificial Intelligence in Medicine	**3**
Total		**17**

Second Semester		
Course No.	**Course Name**	**Credit Hours**
70403248	Principles of Genetics and Molecular Biology	**3**
70403262	Cardiovascular System	**5**
70403264	Blood and Lymphatic System	**4**
70403266	Digestive System	**6**
Total		**18**

Summer Semester		
Course No.	**Course Name**	**Credit Hours**
70403274	Public Health	**3**
70403272	Epidemiology and Biostatistics	**3**
	University Req. Course	**3**
Total		**9**

Third Year

First Semester		
Course No.	**Course Name**	**Credit Hours**
70403357	Introduction to Medical Immunology	**2**
70403361	Musculoskeletal System and Skin	**5**
70403363	Respiratory System	**5**
70403365	Endocrine System	**4**
	University Req.	**2**
Total		**18**

Second Semester		
Course No.	**Course Name**	**Credit Hours**
70403384	Health Economics and Policies	**2**
70402332	Behavioral Science	**3**
70403362	Nervous System and Special Senses	**7**
70403364	Genitourinary System	**6**
Total		**18**

Summer Semester		
Course No.	**Course Name**	**Credit Hours**
70403378	Principles of quality, patient safety, and infection control	**3**
70402376	Clinical Skills	**3**
	University Req. Course	**3**
Total		**9**

Fourth Year

Course No.	Course Name	Clinical Training in Weeks	Credit Hours
70402471	Introduction to Clinical Medicine and Medical Ethics (1)	4	4
70402432	Medicine (1)	10	10
70402443	General Surgery (1)	10	10
70402434	Clinical Neurosciences	3	3
70402445	Orthopedic Surgery	4	4
70402446	Anesthesia and Intensive Care	3	3
70402467	Primary Health Care	-	3
	Total	**34**	**37**

Fifth Year Including Summer Semester

Course No.	Course Name	Clinical Training in Weeks	Credit Hours
70402571	Introduction to Clinical Medicine and Medical Ethics (2)	2	2
70402561	Family Medicine	4	4
70403582	Health Informatics System (2)	-	3
70402593	Introduction to Clinical Research	-	3
70402581	Diagnostic Radiology	2	2
70402551	Pediatrics (1)	8	8
70402582	Forensic Medicine	1	1
70402533	Psychiatry	4	4
70402554	Gynecology and Obstetrics (1)	8	8
70402545	Ophthalmology	2	2
70402546	Urology	2	2
70402547	Otolaryngology	2	2
70402538	Dermatology	2	2
70402569	Emergency Medicine	2	2
Total		**39**	**45**

Sixth Year Including Summer Semester

Course No.	Course Name	Clinical Training in Weeks	Credit Hours
70402653	Pediatrics (2)	8	8
70402634	Medicine (2)	8	8
70402645	General Surgery (2)	8	8
70402656	Gynecology and Obstetrics (2)	8	8
70402691	Elective Clinical Training	8	8
70402692	Graduation Project (Research Project)	-	6
	Total	**40**	**46**

Important Notes:

***** Students who're the Arabic Language is not a mother language can take special courses in Arabic (Arabic courses for Non-Arabic speakers).

* Military Sciences Course is required from Jordanians only. The Non-Jordanian students who have not registered for this course must register and study another course from the Elective University Requirements courses.

* Make sure to have a copy of the regulations governing the awarding of a 70403degree in the faculty of Medicine at Al-Balqa Applied University and read it very carefully for your own benefit.

Course Description

Course Number: 71606151	Course Name: Organic Chemistry for Medical Students	4 Credit Hours
This course introduces the science of organic chemistry for medical students. It emphasizes the structural, physical and chemical properties of the organic compounds. It covers saturated hydrocarbons, unsaturated hydrocarbons, benzene, and aromatic compounds, stereochemistry, substitution and elimination reactions for alkyl halides, alcohols, phenols, ethers, aldehydes, ketones, carboxylic acid derivatives, and amines.		
Course Number: 71605136	**Course Name: Medical Physics**	**3 Credit Hours**
In this course, the following material will be covered: One-dimensional motion, two-dimensional motion, and Newton's laws of motion, conservation of energy, the ideal gas, and Archimedes' principle, equation of continuity, Bernoulli's equation, optics, and radiation.		
Course Number: 71603135	**Course Name: General Biology**	**3 Credit Hours**
This course covers, water and its importance to the environment and organisms, large bio-molecules (structure and function), structure and function of primitive objects, nucleus, mitosis and meiosis, DNA molecule and molecular genetics, DNA techniques, genetics of viruses, bacteria, fungi, cellular metabolism and enzymes, membranes, the origin of species. This course will also cover the general aspects of the following systems: digestive, cardiovascular, immune, reproductive, nervous and circulatory.		
Course Number: 71603137	**Course Name: General Biology Lab**	**1 Credit Hour**
Prerequisite: (General Biology) 71603135. This course will cover; the microscope and its usage to study the cell, chemical aspects of animal and plant cells, the anatomy of the cells in living preparations and cell division.		
Course Number: 70403281	**Course Name: Artificial Intelligence in Medicine**	**3 Credit Hour**
This introductory course provides medical students with an understanding of the fundamental concepts of Artificial Intelligence (AI) and its application in modern healthcare. The course covers key concepts in AI technologies, including machine learning and big data, and explores their use in medical imaging, diagnostics, drug discovery, treatment, and personalized medicine. The course covers essential AI tools and techniques, including supervised and unsupervised learning. Practical skills will be gained through online tools. Students will learn about AI model evaluation, optimization, and interpretability. This course is designed to equip students with the knowledge and critical thinking skills needed to navigate the evolving role of AI in enhancing clinical decision-making, patient care, and treatment outcomes. The course concludes with engaging students in discussions on ethical, legal, and social implications of AI		

Course Number: 70403132	Course Name: Anatomy & Embryology	3 Credit Hours
This course covers an introduction to the gross anatomy of the body parts (upper & lower limbs, thorax, abdomen, head & neck, and anatomy of the nervous system) including; terms, regions, muscles, blood vessels, and nerves. This course also covers general embryology including the development of embryo starting from the zygote, the fetal membranes, placenta, and congenital anomaly.		
Course Number: 70403134	**Course Name:** **General Histology**	**2 Credit Hours**
This course covers the cell with respect to structure, function, and classification, epithelial cells, the cell structure of endocrine glands, peripheral blood, connective tissues, bone and cartilage, muscles, nerves, blood vessels, lymph reticular tissue, skin, and appendages.		
Course Number: 70403233	**Course Name:** **Introduction to Physiology**	**2 Credit Hours**
This course covers the definition of physiology and the systems involved. It includes the study of basic principles of physiology that involve subjects like, physiological units, biological membranes, transport, homeostasis, body fluids, membrane potentials, hemodynamics and laws of blood flow		
Course Number: 70403146	**Course Name:** **Introduction to Biochemistry**	**2 Credit Hours**
This course covers the relationship between organic chemistry and biochemistry, the structure of water and its properties including polarization and ionization, acids, bases, and buffers. It also covers the study of the structure and classification of carbohydrates, lipids, and amino acid, structure, and characteristics of proteins, hemoglobin, fibrous proteins, enzymes including their general properties, classification, kinetics, mechanisms of inhibition and regulation.		
Course Number: 70403241	**Course Name:** **Biochemistry**	**3 Credit Hours**
Course Prerequisites: Introduction to Biochemistry (70403146**).** This course covers nucleic acids and nucleotides and gene structure. It also covers energy metabolism including cellular bioenergetics, tricarboxylic acid cycle, and oxidative phosphorylation. The course also covers carbohydrate and lipid metabolism, nitrogen, amines, acids in addition to nutrients and vitamins.		
Course Number: 70403257	**Course Name:** **Introduction to Pharmacology**	**3 Credit Hours**
This course covers the study of general characteristics of drugs and their historical development, drug formulation and their sources, drug receptors, pharmacodynamics including mechanisms of action, therapeutic doses, drug absorption, distribution in the body, metabolism and excretion, drug reactions and toxicity, clinical evaluation of drugs, prescription, and drug information sources. It also covers chemotherapy including types, mechanisms action, pharmacodynamics and side effects of antimicrobial agents and anticancer drugs.		
Course Number: 70403158	**Course Name:** **Introduction to Microbiology**	**3 Credit Hours**

This course covers the study of microorganisms with respect to the classification and structure of bacteria, viruses, parasites, and fungi, their characteristics, growth and replication, and their susceptibility to antimicrobials. It also covers the study of the types of microorganisms that cause human disease, their pathogenesis, and methods of diagnosis, prevention, and control.

Course Number:	**Course Name:**	**3 Credit Hours**
70403255	**Introduction to Pathology**	

This course covers the study of cell injury including its types, causes, and mechanisms, cellular adaptation to growth and differentiation, inflammation including its types and mechanisms, cellular healing, infections and its causes and characteristics, tumors and neoplasia, types of cancer, its mechanisms of occurrence, characteristics and epidemiology, and circulatory disorders including edema, congestion, thrombosis, infarction and shock.

Course Number:	**Course Name:**	**2 Credit Hours**
70403357	**Introduction to Medical Immunology**	

This course covers the immune system including types of cells and tissues, their distribution in the body, their functions, growth, development and differentiation, antigens and their characteristics, antibodies and their types and functions, serologic reactions, the complement system and its functions and activation, interaction between cells in the generation of the immune response, and immunologic disorders including autoimmunity, hypersensitivity, tumor immunology, immunology of transplantation, and immunodeficiency diseases. Also, it covers the drugs used in the treatment of these diseases.

Course Number:	**Course Name:**	**3 Credit Hours**
70403248	**Principles of Genetics and Molecular Biology**	

This course covers the basic principles of molecular biology and molecular genetics. Emphasis will be given to those principles that have application in medical practice. The structure of DNA and RNA as genetic material, DNA organization and its replication, mutation, and repair in both prokaryotes and eukaryotes will be covered. Furthermore, gene expression will also be discussed. The course also will cover some aspects of cancer genetics, cytogenetic and molecular biology techniques.
The principles of molecular genetics and their application to a wide variety of clinical problems. The practice of modern medicine includes recognition of the role of genetic factors in health and disease. This requires knowledge of the structure, function, and transmission of genes and Understanding of interactions both among genes and between genes and the environment.

Course Number:	**Course Name:**	**3 Credit Hours**
70403279	**Community Medicine**	

This course covers the topics of population science, primary health care, mother and child health, ecology, health care systems, and health planning. It also covers the concept of environmental health, studies the sources of pollution, classification of pollutants; including water, air, soil, and occupational pollutants, the relationship between pollution and work and social behavior, the effect of pollution on health and methods of prevention of pollution and equipment used in this regard.

Course Number:	**Course Name:**	**3 Credit Hours**
70403274	**Public Health**	

This course covers health in the world from the aspects of measuring health and diseases in communities and the reasons of their disparities and diseases burden, health equity, culture and health, environmental health, chronic diseases, non-communicable disease, infectious diseases, mother and child health, breastfeeding, nutrition, child development and mental health. The course also covers health systems, health challenges especially to developing and emerging nations with limited resources, health priorities for population groups with diverse cultural backgrounds, catastrophes and emergencies, globalization and health, international human rights, social justice, and international health regulations.

Course Number: 70403272	**Course Name: Epidemiology and Biostatistics**	**3 Credit Hours**

This course covers analytical and descriptive epidemiology, the epidemiology of infectious and chronic diseases; transmission of infectious diseases, descriptive statistics, the theory of probabilities, levels of significance, hypothesis testing, regression and correlation and the use of statistics in epidemiology.

Course Number: 70403384	**Course Name: Health Economics and Policies**	**2 Credit Hours**

This course aims to introduce students to the general concepts of health economics and health policies. The course will cover the topics of health value, demand on health care, health insurance markets, health care management, governmental health insurance programs, health reform policies, health expenditure control, cost analysis, and cost-effectiveness, health determinants, and health behaviors. It will also cover the economics of bad habits including smoking and alcohol consumption, methods to improve health care delivery, evaluation of medical technology, regulations of health care delivery physicians, components of health care delivery including hospitals and the pharmaceutical industry.

Course Number: 70403365	**Course Name: Endocrine System**	**4 Credit Hours**

This course covers the endocrine system from the standpoints of anatomical and histological structure, hormones including their structures, functions, mechanisms of action receptors, and their metabolism in addition to the endocrinology disorders including hyperactivity or hypoactivity, immune-mediated diseases, benign and malignant tumors and pharmacological properties of hormones and drugs used in the treatment of endocrine diseases. The course is concluded by studying the clinical aspects of the endocrine system including signs, symptoms and disease presentation.

Course Number: 70403266	**Course Name: Digestive System**	**6 Credit Hours**

This course covers the digestive system including the alimentary tract, liver, biliary tree and the pancreas from the standpoints of anatomical and histological structure and function including motility, secretions, digestion, the chemistry of saliva and gastric secretions, bile, pancreatic secretions, and digestive enzymes. It also covers diseases of the digestive system including infections, congenital and acquired malformations, vascular disorders, peptic ulcer, and tumors of the digestive system, immune-mediated diseases, and drugs used in the treatment of these diseases as well as the clinical aspects of the system including signs, symptoms, and disease presentation.

Course Number:	**Course Name:**	**5 Credit Hours**
70403361	**Musculoskeletal System and Skin**	

This course covers the study of the locomotor system and skin including the anatomy and histology of nerves, muscles, and skin; the physiology of nerves and muscles, the biochemistry of muscle contraction and neurotransmission. It also covers the diseases of the skin, muscles and nervous tissues including bacterial, viral, parasitic and fungal infections, together with disturbances of metabolism and genetics of the locomotor system and tumors of muscles, bones, and joints. The course covers also the therapeutics of such diseases and their clinical aspects including signs and symptoms, and disease presentation.

Course Number:	**Course Name:**	**7 Credit Hours**
70403362	**Nervous System and Special Senses**	

This course covers nervous system and special senses from the standpoints of anatomy, histology and organization of the central and peripheral nervous system including the brain, spinal cord, and nerves including their motor and sensory functions in addition to the study of vision, hearing and chemical sense, cerebral cortex and intellectual functions, neurotransmission including its chemistry, receptors and neurotransmitters, and chemistry of vision. It also covers diseases of the central nervous system and organs of special senses including bacterial, viral, fungal and parasitic infections, brain edema, hydrocephalus, vascular disturbances, trauma, congenital malformations, tumors, degenerative and immune-mediated disorders and the drugs used for the treatment of these diseases. The course is concluded by covering the clinical aspects of the disease that affect the central and peripheral nervous system as well as special senses.

Course Number:	**Course Name: Cardiovascular System**	**5 Credit Hours**
70403262		

This course covers cardiovascular system from the standpoints of anatomy and histology of the heart, veins, arteries and capillaries, functions of the cardiovascular system including the physiology of the heart, membrane properties, heart contractility, and its mechanisms, electrical conduction and electrocardiography, heart as a pump and cardiac cycle, blood flow, and its disorders, cardiac output, blood pressure regulation, cardiac effort, circulatory disorders, heart failure, and cardiac enzymes and their relationship to myocardial infarction. It also covers diseases of the heart and blood vessels including infections, atherosclerosis, hypertension, ischemic heart diseases, congenital heart diseases and treatment of cardiovascular diseases. The course is concluded by the study of the clinical aspects of the cardiovascular system including signs, symptoms, and disease presentation.

Course Number:	**Course Name:**	**(5) Credit Hours**
70403363	**Respiratory System**	

This course covers respiratory system from the standpoints of its anatomy and histology, functions including respiration and its mechanisms and characteristics, airway resistance, gas diffusion in the lung, and gas exchange and transport, pulmonary function tests, chemical properties of oxygen, its transport and abnormalities and respiratory alkalosis and acidosis. It also covers diseases of the respiratory tract including infections, vascular, obstructive, occupational and immune-mediated diseases, tumors of the respiratory tract and pharmacologic treatment of these diseases. The course is concluded by covering the clinical aspects of the system.

Course Number:	**Course Name:**	**(4) Credit Hours**
70403264	**Blood and Lymphatic System**	

This course covers the cellular elements of lymph, blood and the histology of both central and peripheral lymphatic systems, including bone marrow, thymus, spleen and lymph nodes. It also covers the production of blood cells, the physiology of tissue fluids, lymph and plasma including the functions of these fluids and cells, bleeding, coagulation, chemistry of blood and lymph together with the structure of hemoglobin, its functions and hemoglobinopathies, plasma proteins, immunological properties of plasma globulins, complement, immunological mechanisms, the diseases that affect blood and the lymphatic system including disturbances of red blood cells, various types of anemia; disturbances of white blood cells including their numbers and functions; leukemia's and lymphomas; disturbances of bleeding and coagulation; diseases of the spleen and thymus; therapeutics of blood and lymphatic diseases. The course also covers the clinical aspects of hematologic and lymphoreticular diseases.

Course Number:	**Course Name:**	**(6) Credit Hours**
70403364	**Genitourinary system**	

This course covers male and female genitourinary systems from the standpoints of anatomy and histology and function including renal physiology which covers glomerular filtration, renal tubule functions, acid-base balance and the role of the kidney in that. It also covers the physiology of the reproductive system of males and females, hormones and their functions as well as diseases of the genitourinary system and breast including infections, benign and malignant tumors, inflammation, placental disorders, gestation, infertility, renal failure and the treatment of these diseases. The course is concluded by covering the clinical aspects of the system including the study of signs, symptoms, and disease presentation.

Course Number:	**Course Name:**	**(1) Credit Hours**
70403131	**Medical Terminology**	

The Introduction to Medical Terminology course is designed to introduce students to a new language of medical terminology. A study of word origin and structure through the introduction of prefixes, suffixes, root words, plurals, abbreviations and symbols, surgical procedures, medical specialties, and diagnostic procedures. This course is designed to introduce the students to basic word parts used in the field of medicine.

Course Number: 70403182	Course Name: Health Informatics Systems (1)	(3) Credit Hours

This course helps you to understand what IT components are available and how you can utilize appropriate IT applications for success. You will learn the terminology used in the field of Health Information Systems –HIT and how IT principles can apply to healthcare systems. The course stresses the competitive advantage of using HIT and the return on investment that you can see. It focuses on the basic principles of Health Information Technology: hardware and software components, database technology, telecommunications and networking, e-commerce and e-business, Enterprise Resource Planning (ERP), Decision Support Systems (DSS), Artificial Intelligence (AI) and Expert Systems (ES), systems development and implementation. Finally, the students are introduced to the challenges associated with implementing a new health information system, and how the risks of implementation failure could be mitigated.

Course Number: 70403184	Course Name: Health Care Management	(2) Credit Hours

This course is designed to study the basic managerial principles and functions of planning, organizing, staffing, directing, and controlling resources to accomplish organizational goals. The systems concept of management and the role of the manager at each level of the organization are emphasized. In addition, a special emphasis will be placed on Health Care Management which provides a framework for addressing management problems in health care organizations. Furthermore, students will explore various concepts and theories of leadership and how these might be applied to and impact management functions in health care settings.

Course Number: 70402376	Course Name: Clinical Skills	(3) Credit Hours

The course is designed to introduce medical students to basic clinical skills. These essential basic clinical skills include:

- Ability to obtain basic patients' history
- Undertake general physical
- Understand the patients' perspective
- Interpretation of findings
- Understand and perform certain basic technical procedures.

It also provides hands-on training and practice under supervision to prepare medical students before their first contact with real patients in the clinic or hospital setting. Also, it will help students to integrate their knowledge of basic sciences with clinical practice. These concepts could be achieved through an emphasis on communication skills between health care providers and patients and between different medical staff.

Course Number: 70402332	Course Name: Behavioral Science	(3) Credit Hours

This course is an introduction to and survey of the science of human behavior and mental processes. There is a primary emphasis on the application of scientific reasoning and the empirical method to the study of topics such as learning and cognition, the biological bases of behavior, personality, motivation and emotion, social and group dynamics, developmental processes, and behavioral disorders and treatment.

Course Number:	Course Name:	(3) Credit Hours

70403378	Principles of Quality, Patient Safety, and Infection Control	
This course is aimed at informing students with an overview of concept and basic elements of Quality, evaluation of quality, quality measures and principals in the process of Quality Improvement across the Health Care, and to provide knowledge about the impact of Health care Associated Infections (HAI) in the complexity of the causes and drivers of the spread of HAI, and the activities required for the prevention and control of HAIs. The course content includes components infection control programs recognized as core to any sound program by the World Health Organization. It aims to provide participating students with essential information and fundamental principles on patient safety and their application in the prevention and control of healthcare-associated infections.		
Course Number: 70402471	**Course Name: Introduction to Clinical Medicine and Medical Ethics (1)**	**(4) Credit Hours (4 Weeks)**
This course covers communication skills with patients and their relatives and the skills of history taking and physical examination of different body systems and the study of signs and symptoms of the diseases that affect the body through clinical training of 4th year, lectures, and seminars over an eight week period. The course also covers the topics of medical informatics and medical ethics through lectures, seminars, and practical training.		
Course Number: 70402432	**Course Name: Medicine (1)**	**(10) Credit Hours (10 Weeks)**
This course covers through ten weeks of clinical training, lectures, seminars and group discussions diseases that affect humans including methods of history taking and performing the physical examination to reach into diagnosis by studying these signs and symptoms. Additionally, the course covers the therapeutics and interventions used in the treatment of such diseases.		
Course Number: 70402443	**Course Name: General Surgery (1)**	**(10) Credit Hours (10 Weeks)**
This course covers surgical diseases that affect the different body systems, including history taking and physical examination to reach into a diagnosis and the surgical methods used for their treatment and patient follow up after surgery through clinical training, lectures, seminars, and group discussions. In addition, students will be exposed to clinical training in anesthesia and critical care.		
Course Number: 70402434	**Course Name: Clinical Neurosciences**	**(3) Credit Hours (3 Weeks)**
This course covers diseases that affect the central and peripheral nervous system including infections, tumors, degenerative diseases, and aging-related illnesses. In addition, the course covers road traffic accidents, falling down and cerebrovascular accidents including intracranial hemorrhage and clotting. It also covers history taking and performing a proper physical examination to reach into diagnosis through programmed clinical training for three weeks, in neurology and neurosurgery in addition to lectures, seminars, and group discussions.		
Course Number: 70402446	**Course Name: Anesthesia and Intensive Care**	**(3) Credit Hours (3 Weeks)**

This course covers, through clinical training, lectures and seminars methods in modern anesthesia in addition to the management of intensive care patients. The course also covers the management of severe and chronic pain.

Course Number:	Course Name:	(4) Credit Hours (4 Weeks)
70402445	**Orthopedic Surgery**	

This course covers specific surgical specialties through the study of signs and symptoms, etiology and means of clinical, laboratory and radiological diagnoses, in addition to ways of medical and surgical treatment including physiotherapy and rehabilitation for a period of four weeks of clinical training including lectures seminars and group discussions.

Course Number:	Course Name:	(3) Credit Hours
70402467	**Primary Health Care**	

This course provides a knowledge base to understand Primary Health Care (PHC) concepts, principles as well as different PHC programs including reproductive health and safe motherhood. Medical students will spend three week period in PHC-medicine rotation in PHC centers. Students during this rotation are exposed to different health problems commonly seen in these PHC centers. Their role includes communication with patients, physical examination and active participation in the management plan. Lectures and seminars are conducted on common diseases as well as on disease prevention and health promotion. These sessions will focus on learning clinical skills essential to medicine and will include hands-on, team-based and case-based learning.

Course Number:	Course Name:	(2) Credit Hours (2 Weeks)
70402571	**Introduction to Clinical Medicine and Medical Ethics (2)**	

This course covers communication skills with patients and their relatives and the skills of history taking and physical examination of different body systems and the study of signs and symptoms of the diseases that affect the body through clinical training of 5th year, lectures, and seminars over an eight week period. The course also covers the topics of medical informatics and medical ethics through lectures, seminars, and practical training.

Course Number:	Course Name:	(8) Credit Hours (8 Weeks)
70402551	**Pediatrics (1)**	

This course covers child development and growth both mentally and physically since birth, pediatric care and prevention and control of diseases of childhood. It also covers diseases affecting children, its etiology, mechanisms, symptoms and signs, diagnosis, prevention and treatment of these diseases medically or surgically through eight weeks of programmed clinical training, lectures, seminars and group discussions.

Course Number:	Course Name:	(4) Credit Hours (4 Weeks)
70402533	**Psychiatry**	

This course covers psychiatric disorders affecting humans, their etiology, mechanisms symptoms and signs, diagnosis and dealing with the psychiatric patient and psychiatric interventions. It also covers psychoorganic connection in certain diseases, pediatric and geriatric disorders, drug abuse and narcotic and alcohol addiction, and psycho-sexual disorders. These topics are covered through clinical training for four weeks in psychiatric outpatient clinics and hospitals through lectures, seminars, and group discussions.

Course Number: 70402545	Course Name: Ophthalmology	(2) Credit Hours (2 Weeks)
This course covers diseases of the eye including trauma, refractive errors and ways of their diagnosis and medical and surgical treatment, through a two week period of clinical training, lectures, seminars, and group discussions.		
Course Number: 70402547	**Course Name: Otolaryngology**	**(2) Credit Hours (2 Weeks)**
This course covers diseases of the ear, nose, and throat together with disturbances of hearing, speech and balance, through the study of signs and symptoms, etiology and means of clinical, laboratory and radiological diagnoses, in addition to audio testing and testing of balance, together with the ways of treatment of such disturbances both medically and surgically, and prevention and control, through a two week period of programmed clinical training, lectures, seminars and group discussions.		
Course Number: 70402546	**Course Name: Urology**	**(2) Credit Hours (2 Weeks)**
This course covers diseases that affect the urinary system including infections, obstructive lesions, tumors and anomalies as well as methods of diagnosis and treatment through a two-week clinical training, lectures and seminars and group discussions.		
Course Number: 70402538	**Course Name: Dermatology**	**(2) Credit Hours (2 Weeks)**
This course covers diseases of the skin and its appendages and pigmentation disorders involving causes, signs and symptoms and therapeutic interventions as well as their epidemiology through two weeks of clinical training, lectures, seminars, and group discussions.		
Course Number: 70402569	**Course Name: Emergency Medicine**	**(2) Credit Hours (2 Weeks)**
This course covers training in emergency medicine including the principles of diagnosis and treatment of medical and surgical emergencies as well as management of accidents and casualties and the legal aspects in medical practice.		
Course Number: 70402582	**Course Name: Forensic Medicine and Toxicology**	**(1) Credit Hours (1 Week)**
This course covers training in the management of accidents and casualties and the legal aspects in medical practice, medicolegal accidents, medicolegal death, medicolegal responsibilities as well as criminal investigations and methods of identification of the dead and the alive through two weeks of programmed clinical training, lectures, seminars, and group discussions. It also covers occupational, agricultural, industrial and medical poisoning.		
Course Number: 70402581	**Course Name: Diagnostic Radiology**	**(2) Credit Hours (2 Weeks)**

This course is achieved through lectures and seminars which cover the principles of imaging and its clinical applications in the diagnosis of diseases and injuries of the different body systems utilizing simple x-rays, computerized tomography, nuclear resonance, ultrasonography, and radioisotope scanning.

Course Number:	Course Name:	(4) Credit Hours (4 Weeks)
70402561	**Family Medicine**	

This course is for four weeks of clinical training that covers family medicine involving the training of students to provide comprehensive medical care for all family members utilizing available resources and consultative services with the aim to reach to quality care. The course also covers subjects related to community health including environmental health, school health, immunization programs as well as medical records and medical informatics.

Course Number:	Course Name:	(8) Credit Hours (8 Weeks)
70402554	**Obstetrics and Gynecology (1)**	

This course covers diseases affecting the female reproductive system, infertility, menstrual disturbances; their signs and symptoms, pathogenesis, methods of diagnosis and evaluation, medical and surgical treatment, follow up, epidemiology, prevention, and control. It also covers methods of caring for the pregnant during pregnancy, labor and after delivery, normal and instrumental delivery and cesarean section. In addition, it covers diseases of pregnancy, fertility, ectopic and pathological pregnancy, birth control and contraception are covered. The course is executed through programmed clinical training, lecture seminars, and group discussions.

Course Number:	Course Name:	(3) Credit Hours
70403582	**Health Informatics Systems (2)**	

This course will help you to understand the available IT components in general and how appropriate IT applications can be used effectivly. It focuses on the underlying principles of health information technology: hardware and software components, database technology, communications and networking, e-commerce and business. Electronic, ERP, Decision Support Systems, Artificial Intelligence and Expert Systems, Systems Development and Implementation. Finally, students learn about the challenges associated with implementing a new health information system and how to mitigate the risk of implementation failure.

Course Number:	Course Name:	(3) Credit Hours
70402593	**Introduction to Clinical Research**	

This course aims to introduce the student to qualitative research and how to employ it in solving problems and issues related to the medical, and to identify the main curricula such as anthropography and the massacre theory and case study and phenomena, and other research methods as well as conduct the concept of sampling in it and collect data through observing, interviewing and analyzing documents, methods of analyzing qualitative data, writing a qualitative research report, and the ethical dilemmas facing the researcher in the framework of qualitative research.

Course Number:	Course Name:	(8) Credit Hours (8 Weeks)
70402691	**Elective Clinical Training**	

This course assigned for clinical training for a period of eight weeks in a given clinical specialty which will be elected by the student to be performed in recognized hospitals or medical centers inside or outside Jordan.		
Course Number: 70402634	**Course Name:** **Medicine (2)**	**(8) Credit Hours** **(8 Weeks)**
This course provides the training of students in outpatient clinics and specialized units covering clinical manifestations of diseases, their diagnosis, and treatment. The course is delivered through clinical training, lectures, tutorials, seminars, and discussions.		
Course Number: 70402645	**Course Name:** **General Surgery (2)**	**(8) Credit Hours** **(8 Weeks)**
This course involves the training of students in outpatient clinics, specialized units and operating rooms covering clinical manifestations of diseases, their diagnosis, and treatments in addition to postoperative follow-up. The course is delivered through clinical training, tutorials, lectures, seminars, and discussions.		
Course Number: 70402653	**Course Name:** **Pediatrics (2)**	**(8) Credit Hours** **(8 Weeks)**
This course covers pediatric diseases, methods of treatment and care for the child through programmed clinical training in outpatient clinics, Intensive Care Unit, and Neonatal Intensive Care Unit, seminars and group discussions. Students are trained to deal with pediatric diseases through a problem-solving approach.		
Course Number: 70402656	**Course Name:** **Obstetrics and Gynecology (2)**	**(8) Credit Hours** **(8 Weeks)**
This course covers the study of gynecological diseases, pregnancy, antenatal care, family planning, and contraception through programmed clinical training for a period of four weeks in outpatient clinics, delivery room, and obstetrics operation room in addition to lectures, seminars, and group discussions.		
Course Number: 70402692	**Course Name:** **Graduation Project**	**(6) Credit Hours**
Each student will select a medical problem or topic and use either quantitative or qualitative research inquiry to deal with it under the supervision of a teaching staff member. The student must write a research paper at the end of the course about this project and discuss it with his supervisor to be submitted for approval.		