

AL-BALQA APPLIED UNIVERSITY
FACULTY OF MEDICINE

Study Plan Structure: Bachelor's degree in Doctor of Medicine
(M.D)

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

The modified study plan qualify 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 2020/2021. 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	Practical	
AAL101	Applied Arabic Language	-	3	-	3
AEL101	Applied English Language (1)	-	3	-	3
AEL102	Applied English Language (2)	AEL101	3	-	3
CS101	Computer Skills and E-learning	-	1	-	1
MS101	Military Sciences	-	3	-	3
NE101	National Education and University Behavior	-	3	-	3
IEC101	Innovation, Entrepreneurship, and Creativity	-	2	-	2
Total		-	18	-	18

- Elective University Requirements:

(6) Credit hours, the student should choose from the below courses posed by other departments:

Course No.	Course Name	Credit hours
36001101	Communication Skills	3
36002102	Principles of Psychology	3
36003103	Jordanian Society	3
36004104	Sports and Health for All	3
36005105	Islamic Culture	3
36009110	Contemporary Management Concepts and Skills	3
36007107	Agriculture in Jordan	3
36008108	Environment and Society	3
36012109	History of Righteous Caliphs	3
36009111	Economic Concepts	3
36009109	Islam and Life	3
36009115	Digital Society	3
36009114	Jerusalem (Palestinian Cause)	3
36009112	Law, Media, and Society	3

Note:

- All students must pass the 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		
30203104	General Biology	3	-	-	3
30203114	General Biology/Practical	-	3	30203104	1
CHM 112	Organic Chemistry for Medical Students *	4	-	-	4
30201106	Medical Physics	3	-	-	3
30801101	Computer Skills (2) for Students from Scientific Faculties	2	3	-	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)	
BMS 111	Medical Terminology	1	-	1
BMS 112	Anatomy and Embryology	2	3	3
BMS 114	General Histology	1	3	2
BMS 116	Introduction to Biochemistry	2	-	2
BMS 118	Introduction to Microbiology	3	-	3
BMS 122	Health Informatics System (1)	1	6	3
BMS 124	Health Care Management	2	-	2
BMS 211	Biochemistry	3	-	3
BMS 213	Introduction to Physiology	2	-	2
BMS 214	Public Health	3	-	3
BMS 215	Introduction to Pathology	2	3	3
BMS 218	Principles of Genetics and Molecular Biology	3	-	3
BMS 219	Community Medicine	3	-	3
BMS 222	Epidemiology and Biostatistics	3	-	3
BMS 232	Cardiovascular System	4	3	5
BMS 234	Blood and Lymphatic System	3	3	4
BMS 236	Digestive System	5	3	6
BMS 237	Introduction to Pharmacology	3	-	3
BMS 317	Introduction to Medical Immunology	2	-	2
BMS 324	Health Economics and Policies	2	-	2
BMS 326	Behavioral Science	3	-	3
BMS 328	Principles of quality, patient safety, and infection control	3	-	3
BMS 331	Musculoskeletal System and Skin	4	3	5
BMS 332	Nervous System and Special Senses	5	6	7
BMS 333	Respiratory System	4	3	5
BMS 334	Genitourinary System	5	3	6
BMS 335	Endocrine System	3	3	4
BMS 346	Clinical Skills	1	6	3
Total in Contact Hours		80	42	122
Total in Credit Hours		78	16	94

C- Requirements in Clinical Sciences:

(128) Credit hours including the following courses:

Course No.	Course Name	Clinical Training in Weeks	Credit Hours
MD 421	Introduction to Clinical Medicine and Medical Ethics (1)	4	4
MD 442	Medicine (1)	10	10
MD 443	General Surgery (1)	10	10
MD 444	Clinical Neurosciences	3	3
MD 445	Orthopedic Surgery	4	4
MD 446	Anesthesia and Intensive Care	3	3
MD 447	Primary Health Care	-	3
MD 511	Family Medicine	4	4
MD 521	Introduction to Clinical Medicine and Medical Ethics (2)	2	2
MD 522	Health Informatics System (2)	-	3
MD 523	Introduction to Clinical Research	-	3
MD 540	Diagnostic Radiology	2	2
MD 541	Pediatrics (1)	8	8
MD 542	Forensic Medicine and Toxicology	1	1
MD 543	Psychiatry	4	4
MD 544	Obstetrics and Gynecology (1)	8	8
MD 545	Ophthalmology	2	2
MD 546	Urology	2	2
MD 547	Otolaryngology	2	2
MD 548	Dermatology	2	2
MD 549	Emergency Medicine	2	2
MD 641	Pediatrics (2)	8	8
MD 642	Medicine (2)	8	8
MD 643	General Surgery (2)	8	8
MD 644	Obstetrics and Gynecology (2)	8	8
MD 691	Elective Clinical Training	8	8
MD 692	Graduation Project	-	6
Total		113	128

Guidance Plan for Registration Purposes (Annual Plan):

First Year

<i>First Semester</i>		
Course No.	Course Name	Credit Hours
30203104	General Biology	3
30203114	General Biology/Practical	1
30201106	Medical Physics	3
30801101	Computer Skills (2) for Students from Scientific Faculties	3
CHM 112	Organic Chemistry for Medical Students	4
BMS 111	Medical Terminology	1
	<u>University Req. Course</u>	3
Total		18

<i>Second Semester</i>		
Course No.	Course Name	Credit Hours
BMS 112	Anatomy and Embryology	3
BMS 114	General Histology	2
BMS 116	Introduction to Biochemistry	2
CS101	Computer Skills and E-learning (<u>University Req.</u>)	1
BMS 124	Health Care Management	2
BMS 122	Health Informatics System (1)	3
	<u>University Req. Course</u>	3
Total		16

<i>Summer Semester</i>		
Course No.	Course Name	Credit Hours
BMS 118	Introduction to Microbiology	3
	<u>University Req. Course</u>	3
	<u>University Req. Course</u>	3
Total		9

Second Year

<i>First Semester</i>		
Course No.	Course Name	Credit Hours
BMS 211	Biochemistry	3
BMS 213	Introduction to Physiology	2
BMS 215	Introduction to Pathology	3
BMS 219	Community Medicine	3
BMS 237	Introduction to Pharmacology	3
	<u>University Req. Course</u>	3
Total		17

<i>Second Semester</i>		
Course No.	Course Name	Credit Hours
BMS 218	Principles of Genetics and Molecular Biology	3
BMS 232	Cardiovascular System	5
BMS 234	Blood and Lymphatic System	4
BMS 236	Digestive System	6
Total		18

<i>Summer Semester</i>		
Course No.	Course Name	Credit Hours
BMS 214	Public Health	3
BMS 222	Epidemiology and Biostatistics	3
	<u>University Req. Course</u>	3
Total		9

Third Year

<i>First Semester</i>		
Course No.	Course Name	Credit Hours
BMS 317	Introduction to Medical Immunology	2
BMS 331	Musculoskeletal System and Skin	5
BMS 333	Respiratory System	5
BMS 335	Endocrine System	4
IEC 101	(Innovation, Entrepreneurship, and Creativity) <u>University Req.</u>	2
Total		18

<i>Second Semester</i>		
Course No.	Course Name	Credit Hours
BMS 324	Health Economics and Policies	2
BMS 326	Behavioral Science	3
BMS 332	Nervous System and Special Senses	7
BMS 334	Genitourinary System	6
Total		18

<i>Summer Semester</i>		
Course No.	Course Name	Credit Hours
BMS 328	Principles of quality, patient safety, and infection control	3
BMS 346	Clinical Skills	3
	<u>University Req. Course</u>	3
Total		9

Fourth Year

Course No.	Course Name	Clinical Training in Weeks	Credit Hours
MD 421	Introduction to Clinical Medicine and Medical Ethics (1)	4	4
MD 442	Medicine (1)	10	10
MD 443	General Surgery (1)	10	10
MD 444	Clinical Neurosciences	3	3
MD 445	Orthopedic Surgery	4	4
MD 446	Anesthesia and Intensive Care	3	3
MD 447	Primary Health Care	-	3
Total		34	37

Fifth Year Including Summer Semester

Course No.	Course Name	Clinical Training in Weeks	Credit Hours
MD 521	Introduction to Clinical Medicine and Medical Ethics (2)	2	2
MD 511	Family Medicine	4	4
MD 522	Health Informatics System (2)	-	3
MD 523	Introduction to Clinical Research	-	3
MD 540	Diagnostic Radiology	2	2
MD 541	Pediatrics (1)	8	8
MD 542	Forensic Medicine	1	1
MD 543	Psychiatry	4	4
MD 544	Gynecology and Obstetrics (1)	8	8
MD 545	Ophthalmology	2	2
MD 546	Urology	2	2
MD 547	Otolaryngology	2	2
MD 548	Dermatology	2	2
MD 549	Emergency Medicine	2	2
Total		39	45

Sixth Year Including Summer Semester

Course No.	Course Name	Clinical Training in Weeks	Credit Hours
MD 641	Pediatrics (2)	8	8
MD 642	Medicine (2)	8	8
MD 643	General Surgery (2)	8	8
MD 644	Gynecology and Obstetrics (2)	8	8
MD 691	Elective Clinical Training	8	8
MD 692	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 (M.D) degree in the faculty of Medicine at Al-Balqa Applied University and read it very carefully for your own benefit.

Course Description

Course Number: CHM 112	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: 30201106	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: 30203104	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: 30203114	Course Name: General Biology Lab	1 Credit Hour
<p><u>Prerequisite: (General Biology) 30203104.</u></p> <p>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.</p>		
Course Number: BMS 112	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: BMS 114	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: BMS 213	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: BMS 116	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: BMS 211	Course Name: Biochemistry	3 Credit Hours
Course Prerequisites: Introduction to Biochemistry (BMS 116).		
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: BMS 237	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: BMS 118	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: BMS 215	Course Name: Introduction to Pathology	3 Credit Hours
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: BMS 317	Course Name: Introduction to Medical Immunology	2 Credit Hours
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: BMS 218	Course Name: Principles of Genetics and Molecular Biology	3 Credit Hours
<p>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.</p> <p>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.</p>		

Course Number: BMS 219	Course Name: Community Medicine	3 Credit Hours
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: BMS 214	Course Name: Public Health	3 Credit Hours
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: BMS 222	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: BMS 324	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: BMS 335	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: BMS 236	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: BMS 331	Course Name: Musculoskeletal System and Skin	5 Credit Hours
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: BMS 332	Course Name: Nervous System and Special Senses	7 Credit Hours
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: BMS 232	Course Name: Cardiovascular System	5 Credit Hours
<p>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.</p>		
Course Number: BMS 333	Course Name: Respiratory System	(5) Credit Hours
<p>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.</p>		
Course Number: BMS 234	Course Name: Blood and Lymphatic System	(4) Credit Hours
<p>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.</p>		

Course Number: BMS 334	Course Name: Genitourinary system	(6) Credit Hours
<p>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.</p>		
Course Number: BMS 111	Course Name: Medical Terminology	(1) Credit Hours
<p>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.</p> <p>Upon successful completion of the course, students will be able to comprehend a medical record report, communicate among medical professionals and have a high-level overview of medical terms. Intended learners for this course will be first-year medical students. This course will serve as a prerequisite to medical programs such as medical doctor nursing, basic medical sciences, health information management. etc.</p>		
Course Number: BMS 122	Course Name: Health Informatics Systems (1)	(3) Credit Hours
<p>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.</p>		
Course Number: BMS 124	Course Name: Health Care Management	(2) Credit Hours
<p>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</p>		

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: BMS 346	Course Name: Clinical Skills	(3) Credit Hours
<p>The course is designed to introduce medical students to basic clinical skills. These essential basic clinical skills include:</p> <ul style="list-style-type: none"> - Ability to obtain basic patients' history - Undertake general physical - Understand the patients' perspective - Interpretation of findings - Understand and perform certain basic technical procedures. <p>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.</p>		
Course Number: BMS 326	Course Name: Behavioral Science	(3) Credit Hours
<p>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.</p>		
Course Number: BMS 328	Course Name: Principles of Quality, Patient Safety, and Infection Control	(3) Credit Hours
<p>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.</p>		



Course Number: MD 421	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 4 th 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: MD 442	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: MD 443	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: MD 444	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: MD 446	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: MD 445	Course Name: Orthopedic Surgery	(4) Credit Hours (4 Weeks)
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: MD 447	Course Name: Primary Health Care	(3) Credit Hours
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: MD 521	Course Name: Introduction to Clinical Medicine and Medical Ethics (2)	(2) Credit Hours (2 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 5 th 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: MD 541	Course Name: Pediatrics (1)	(8) Credit Hours (8 Weeks)
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: MD 543	Course Name: Psychiatry	(4) Credit Hours (4 Weeks)
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: MD 545	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: MD 547	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: MD 546	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: MD 548	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: MD 549	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: MD 542	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: MD 540	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: MD 511	Course Name: Family Medicine	(4) Credit Hours (4 Weeks)
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: MD 544	Course Name: Obstetrics and Gynecology (1)	(8) Credit Hours (8 Weeks)
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: MD 522	Course Name: Health Informatics Systems (2)	(3) Credit Hours
This course will help you to understand the available IT components in general and how appropriate IT applications can be used effectively. 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: MD 523	Course Name: Introduction to Clinical Research	(3) Credit Hours
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: MD 691	Course Name: Elective Clinical Training	(8) Credit Hours (8 Weeks)
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: MD 642	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: MD 643	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: MD 641	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: MD 644	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: MD 692	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.		