

**Hashemite University**

**Faculty of Medicine**

**Study Plan**

**MD Degree**

**Study Plan**

***First Year:***

|  |  |  |
| --- | --- | --- |
| ***First Semester*** | | |
| **Course No.** | **Course Name** | **Credit Hours** |
| 102109 | General Physics for medical students | 3 |
| 2103101 | General Chemistry (1) | 3 |
| 104101 | General Biology (1) | 3 |
| 104103 | General practical biology-1 | 1 |
| 110109 | Arabic language for medicine students | 3 |
| 2120100 | English language | 3 |
| **Total** | | **16** |
| ***Second Semester*** | | |
| **Course No.** | **Course Name** | **Credit Hours** |
| 1502102 | General Physiology | 2 |
| 1501101 | General Anatomy | 3 |
| 107106 | Military sciences | 3 |
| - | Elective University Requirement | 3 |
| 0103236 | Organic Chemistry for non majors | 3 |
| 1501102 | Histology and molecular Biology | 3 |
| - | Elective University Requirement | 3 |
| **Total** | | **20** |
| ***Summer Semester*** | | |
| **Course No.** | **Course Name** | **Credit hours** |
| 2107108 | National culture | 3 |
| 1502101 | General Biochemistry | 3 |
| 1505101 | Introduction to Community Medicine | 3 |
| **Total** | | **9** |

***Second Year:***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***First Semester*** | | | | |
| **Course No.** | | **Course Name** | | **Credit Hours** |
| - | | Elective University Requirement | | 3 |
| 1503201 | | Principles of genetics & molecular biology | | 2 |
| 1503202 | | General Pathology | | 2 |
| 1503203 | | General Microbiology | | 3 |
| 1504201 | | General Pharmacology | | 2 |
| 1001115 | | Computer skills (2) for science | | 3 |
| **Total** | | | | **15** |
| ***Second Semester*** | | | | |
| **Course No.** | | **Course Name** | | **Credit Hours** |
| 1500201 | | Respiratory system | | 5 |
| 1500202 | | Cardiovascular system | | 5 |
| 1500203 | | Hematopoetic system | | 5 |
| 1505201 | | Epidemiology and Biostatistics | | 3 |
| **Total** | | | | **18** |
| ***Summer Semester*** | | | | |
| **Course No.** | **Course Name** | | **Credit Hours** | |
| 1503204 | Immunology | | 2 | |
| 1505202 | Occupational & Environmental Health and Field Project | | 3 | |
| - | Elective University Requirement | | 3 | |
| **Total** | | | **8** | |

***Third Year***

|  |  |  |
| --- | --- | --- |
| ***First Semester*** | | |
| **Course No.** | **Course Name** | **Credit Hours** |
| 1500301 | The Endocrinocology System | 5 |
| 1500302 | The Digestive System | 6 |
| 1500303 | Skin & Locomotors System | 7 |
| **Total** | | **18** |
| ***Second Semester*** | | |
| **Course No.** | **Course Name** | **Credit Hours** |
| 1500304 | The Genitourinary System | 6 |
| 1500305 | Neurosciences -1 | 5 |
| 1500306 | Neurosciences -II | 4 |
| 1505301 | Clinical psychology | 3 |
| **Total** | | **18** |
| ***Summer Semester*** | | |
| **Course No.** | **Course Name** | **Credit Hours** |
| 1500307 | Introduction to clinical medicine and medical ethics | 9 |
| **Total** | | **9** |

***Fourth year***

|  |  |  |  |
| --- | --- | --- | --- |
| ***First Semester*** | | | |
| **No.** | **Course Name** | **Wk** | **Credit** |
| 111502401 | General surgery 1 | 10 | 10 |
| 111502402 | Neurosurgery | 2 | 2 |
| 111502403 | Urology 1 | 2 | 2 |
| 111500401 | Emergency medicine and anesthesia | 2 | 2 |
| **Total** | | **16** | **16** |
| ***Second Semester*** | | | |
| **No.** | **Course Name** | **Wk** | **Credit** |
| 111503401 | General Internal medicine 1 | 10 | 10 |
| 111503402 | Radiology 1 | 2 | 2 |
| 111503403 | Neurology | 4 | 5 |
| 111501307 | Clinical decision making | - | 3 |
| **Total** | | **16** | 20 |
| ***Summer Semester*** | | | |
| **No.** | **Course Name** | **Wk** | **Credit** |
| 111501401 | Community medicine 1 | 8 | 9 |
| **Total** | | **8** | **9** |

***Fifth year***

|  |  |  |  |
| --- | --- | --- | --- |
| ***First Semester*** | | | |
| **No.** | **Course Name** | **Wk** | **Credit** |
| 111504501 | Pediatrics 1 | 8 | 9 |
| 111502501 | Orthopedics 1 | 4 | 5 |
| 111503502 | Family medicine | 2 | 2 |
| 111503501 | Psychiatry 1 | 2 | 2 |
| **Total** | | **16** | **18** |
| ***Second Semester*** | | | |
| 111505501 | Obstetrics & gynecology1 | 8 | 9 |
| 111502502 | Otolaryngology 1 | 2 | 2 |
| 111502503 | Ophthalmology 1 | 2 | 2 |
| 111503503 | Dermatology 1 | 2 | 2 |
| 111501501 | Forensic medicine & Toxicology 1 | 2 | 2 |
| **Total** | | **16** | **18** |

***Sixth year***

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | | |
| **No.** | **Course Name** | | **Wk** | **Credit** |
| 111504601 | Pediatrics 2 | | 8 | 9 |
| 111503601 | Internal medicine 2 | | 8 | 9 |
| **Total** | | | **16** | **18** |
|  | | | | |
| 111505601 | Obstetrics & gynecology 2 | | 8 | 9 |
| 111502601 | General surgery 2 | | 8 | 9 |
| **Total** | | | **16** | **18** |
|  | | |  |  |
| **-** | | Elective course | 8 | 9 |
| **Total** | | | **8** | **9** |

**Course description**

**1st year – 1st semester**

**General Physics for medical students (102109) 3 credit hours**

Mechanics of motion and levers; refraction of light, sound and its physical principles; electricity

and electric charge conduction; nerve conduction; pressure in liquids; physics applications.

**General Chemistry 1 (2103101) 3 credit hours**

The course aims at studying the basic principles of chemistry; mass relationship in chemical

reactions, reactions in aqueous solutions, gases, Quantum theory and the electronic structure of

atoms, periodic relationships among the elements, basic concepts of chemical bonding, and

Molecular Geometry and Hybridization of atomic orbitals.

**General Biology (1) (0104101) 3 credit hours**

The study of biochemistry, structure and function of the cells, reproduction of cell, general and

molecular genetics, molecular basis of inheritances, biological diversity, introduction to ecology.

**General Biology - Practical (1) (1014103) 1 credit hour**

The study of the microscope, the cell, chemical aspects and physical properties of living

organisms, biochemical activities of the cell, cell division, genetics, organismal diversity

including: prokaryotes; protista, fungi, plants and animals.

**Arabic Language for medicine students (110109) 3 credit hour**

وتتناول هذه المادة تدريب الطلبة على كتابة مقال متماسك تراعى فيه الصحة اللغوية والدقة والوضوح، وتمكينهم من بناء حصيلة ثقافية متنوعة تمثل حقول المعرفة المختلفة، وتدريبهم على استثمار ما عرفوه من نظام الجملة العربية في الوصول إلى المعاني والأفكار في النص ومعرفة العلاقة بين الأفكار الرئيسة والجزئية والمساندة وتدريبهم على تحليل النصوص واستيعاب المقروء وتلخيصه**.**

This subject addresses the students to write an essay in a coherent way taking into account the right linguistic precision and clarity, and enable them to build a variety of cultural outcome representing various fields of knowledge, and train them to use what they knew about the system of Arabic sentence to access meanings and ideas in the text , and to see the relationship between the main & partial ideas and trained them to analyze, absorb & suumarize Arabic texts.

**English Language (2120100) 3 credit hours**

The course is tailored to enrich students' asset of vocabulary, expose them to a variety of

challenging and interesting text-types in reading and structural activities and to expose students

to the most up-to-date English as used on a daily basis. In addition, this course develops students’

intellectual skills and employability skills. It is also intended to prepare students to sit for TOEFL

test and will focus on reading and structure.

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**1st year – 2nd semester**

**General Physiology (1502102) 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.

**General Anatomy (1501101) 3 credit hours**

This course covers introduction in gross anatomy to all parts of the body (upper limb & lower

limb, thorax, abdomen, head & neck, and microanatomy) including terms, regions, muscles,

blood vessels, and nerves as well as to an introduction to the nervous system. This course also

covers general embryology including the development of embryo starting from the zygote, the

fetal membranes, placenta and congenital malformations.

**Military Sciences (0107106) 3 credit hours**

مادة العلوم العسكرية متطلب جامعي اجباري لجميع الطلبة الاردنيين وهي لا تقل عن المساقات الاكاديمية الاخرى وهي ضرورية للتخرج بواقع ثلاث ساعات معتمدة لكل طالب وتكون نتيجتها راسب او ناجح . حيث يتم تزويد الطلبة في الجامعات بالثقافة العسكرية العامة وبيان قدرات القوات المسلحة في الدفاع عن الوطن ودورها في تنمية وخدمة المجتمع الاردني وذلك من خلال المحاضرات والزيارات الميدانية. أما بالنسبة الى الطلبة غير الأردنيين فيتم استبدال هذه المادة بمتطلب جامعي اختياري اخر

Military science is mandatory requirement for all jordanien students, it is not less than other academic courses as it is necessary for graduation for each student by three credit hours with an outcome either pass or fail.This subject provides students in universities military public culture and the capabilities of the armed forces in defending the country and its role in the development of the Jordanian society through lectures and field visits. The non-Jordanian students are replacing this subject by an elective university requirement.

**Organic Chemistry for non majors (103236) 3 credit hours**

The main objective of the course is to teach students the basic principles of organic chemistry.

The first part of the course will cover the fundamental aspects of structural organic chemistry to

familiarize the students the main families of organic chemistry functions as well as the 3D

structure of organic molecules. The basics of reactivity will also covered using the mechanisms.

The course will be frequently illustrated will examples linked to other scientific disciplines, in

particular to the field of life sciences.

**Histology and molecular Biology (1501102) 3 credit hours**

This course covers the cell with respect to structure, function and classification, epithelial cells,

cell structure of endocrine glands, peripheral blood, connective tissues, bone and cartilage,

muscles, nerves, blood vessels, lymphoreticular tissue and skin and appendages.

**1st year – summer Semester**

**General Biochemistry (1502101) 3 credit hours**

This course 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.

This course covers nucleic acids and nucleotides and gene structure. It also covers energy

metabolism including cellular bioenergetics, tricarboxylic acid cycle and oxidative phosphory

lation. The course also covers carbohydrate and lipid metabolisim, nitrogen, amins, acids in

addition to nutritions and vitamins.

**Introduction to Community Medicine (1505101) 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, study 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.

**National culture (2107108) 3 credit hours**

الهدف العام من تدريس هذه المادة يتمحور في ثلاث أبعاد رئيسية هي: ترسيخ الانتماء والولاء والاعتزاز بالوطن أرضا وشعبا ونظاما. وتأهيل الطلبة للقيام بأدوارهم المختلفة مواطنين أردنيين داعمين ومشاركين في مسيرة التنمية الوطنية الشاملة. وإكساب الطلبة مرجعية معرفية مفاهيمية قيمية مهارية تمكنهم من الالتزام بالمواطنة الديمقراطية والسلوك الحضاري.

The overall aim of this subject is to focus on three major dimensions which are: consolidation of belonging ,loyalty and pride in the homeland , people and the regime. Also preparing students to do different roles as a Jordanian supporting and participating in the overall national development. Giving the students an conceptual knowledge and valuable skills to enable them to comply the democracy citizenship and civilized behavior.

**2n year – 1st semester**

**Genetics and Molecular Biology (1503201) 2 credit hours**

This course covers the study of chromosomes and heredity, genetic linkage, chemistry of the

gene, mitosis and meiosis, gamete formation, mechanisms of transfer of genetic traits, genetic

code and its transcription and translation, protein synthesis, mutations, genetic map, sex

determination, sex-linked characteristics, human genetic disorders and their diagnosis and

management, and genetic engineering.

**General Pathology (1503202) 2 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.

**General Microbiology (1503203) 3 credit hours**

This course covers the study of microorganisms with respect to 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, and their pathogenesis, methods of diagnosis and prevention and control.

**General Pharmacology (1504201) 2 credit hours**

This course should cover the following subjects, Pharmacokinetics, Pharmacodynamics, dose

response relationship, drug toxicities and side effects, drug cost-benefit relationship, principles of

drug trials, principles of drug prescription, principles of drug utilization, drug information

facilities and drug interaction, drug epidemiology, principals of antimicrobial drugs, principals of

anticancer drugs, immunosuppressants.

**Computer Skills II for science (1001115) 3 credit hours**

The aim of this course is to introduce the students to programming using the C++ language. In

my opinion, C++ has proven to be a pleasant, expressive and versatile language for wide variety

of programs. It is easy to learn, and it wears well as one's experience with it grows.

The course covers the fundamental concepts for analyzing problem statements, designing

computer solutions, as well as an introduction to syntax and semantics of the C++ language. It

also focuses on data types, variables, constants, operators and expressions, control flows,

functions and arrays.

**2nd year – 2nd semester**

**The Respiratory System (1500201) 5 credit hours**

This course covers the respiratory system from the standpoints of its anatomic and histological

structure, 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.

**The Cardiovascular System (1500202) 5 credit hours**

This course covers the study of the cardiovascular system from the standpoints of anatomic and

histologic structure of 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 myo-cardiac 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.

**Hematopoietic System (1500203) 5 credit hours**

This course covers the study of 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 haemoglobin, its functions and

haemoglobinpathies, 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 anaemia; disturbances of white

blood cells including their numbers and functions; leukaemias 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.

**Epidemiology and biostatistics (1505201) 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.

**2nd year – summer semester**

**Immunology (1503204) 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 is covered

the drugs used in the treatment of these diseases.

**Occupational & Environmental Health & Field Project (1505202) 3 credit hours**

This course covers different topics in the field of occupational health, sources of health hazards

in workplace, major occupation diseases, and workplace hazards prevention. It also covers the

relationship between environment and health including major types of environment pollutants

and methods of protection of the environment. This course includes field applications in various

occupation and environmental issues.

**3rd year – 1st semester**

**The Endocrine System (1500301) 5 credit hours**

This course covers the endocrine system from the standpoints of anatomic and histologic

structure, hormones including their structures, functions, mechanisms of action receptors, and

their metabolism in addition to the endocrinologic 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.

**The Digestive System (1500302) 6 credit hours**

This course covers the digestive system including the alimentary tract, liver, billiard trea and the

pancreas from the standpoints of anatomic and histological structure and function including

motility, secretions, digestion, 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, 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.

**Skin and the Locomotor system (1500303) 7 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.

**3rd year - 2nd semester**

**The Genitourinary system (1500304) 6 credit hours**

This course covers the study of the male and female genitourinary systems from the standpoints

of anatomic and histologic structure 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.

**The Neuroscience I (1500305) 5 credit hours**

This course covers the study of the nervous system from the stand points of anatomy, histology

and organization of the central nervous system including the brain, spinal cord, cerebral cortex

and intellectual functions, neurotransmission including its chemistry, receptors and

neurotransmitters,. It also covers diseases of the central nervous system 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 disease that affect the central system.

**The Neuroscience II (1500306) 4 credit hours**

This course covers the study of the peripheral nervous system and special senses from the stand

points of anatomy, histology and organization of the peripheral nervous system including nerves

their motor and sensory functions in addition to the study of vision, hearing including its

chemistry, receptors and neurotransmitters, and chemistry of vision. The course is concluded by

covering the clinical aspects of disease that affect the special senses.

**Clinical Psychology (1505301) 3 credit hours**

This course covers principles of psychology and introduction to behavioral sciences.

**3rd year – summer semester**

**Introduction to clinical medicine and medical ethics (1500307) 9 credit hours** This course

covers communication skills with patients and their relatives and the skills of history taking and

physical examination of the different body systems and the study of signs and symptoms of the

diseases that affect the body through clinical training, 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.

**4th year**

**General Surgery -1 (111502401) 10 credit hours**

This course covers the study of surgical diseases that affects 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 and seminars.

**General Internal Medicine – 1 (111502403) 10 credit hours**

This course covers through ten weeks of clinical training, lectures and seminars the study of

diseases that affect humans including methods of history taking and performing the physical

examination to reach into a diagnosis by studying these signs and symptoms. Additionally the

course covers the therapeutics and interventions used in the treatment of such diseases.

**Emergency medicine & anesthesia (111500401) 2 credit hours**

This course involves the training of students in emergency and accident medicine covering the

study of diseases and trauma requiring the provision of urgent care. This includes the study of

clinical manifestations, their diagnosis and management. The course also involves training in the

field of anesthesia including preparation of patients before surgery, methods and types of

anesthesia and drugs used and patient recovery. Students are also trained in the intensive care

unit.

**Clinical decision making (111501307) 3 credit hours**

This course focuses on the integration of previous knowledge and skills into the development of the medical student as a provider and coordinator of care and member of the profession.  Emphasis will be on clinical decision-making for clients who have different medical disorders and discussion of decision, judgment, skills, and professional values within a legal/ethical framework.

**Neurosurgery (111502401) 2 credit hours**

This course including injuries of the central and peripheral nervous system, and diseases such as

tumors and congenital anomalies through a two week clinical training, lectures and seminars.

**Urology 1 (111502403) 2 credit hours**

This course involving 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.

**Radiology 1 (111503403) 2 credit hours**

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

**Neurology (111503403) 5 credit hours**

This course covers the study of diseases that affect the central and peripheral nervous system

including infections, tumors, degenerative diseases and aging-related illnesses. It also covers

history taking and performing proper physical to reach into their diagnosis through programmed

clinical training for four weeks, lectures and seminars.

**Fifth year**

**Forensic medicine and toxicology 1 (111501501) 2 credit hours**

This course covers topics in 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 in the

clinic, postmortem rooms and the court, lectures and seminars. It also covers occupational,

agricultural, industrial and medical poisoning**.**

**Family medicine (111503502) 2 credit hours**

This course covers two weeks 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 a 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 through a two-week programmed clinical training, lectures and

seminars. And this course covers clinical training for a period of eight weeks in a specialty the

student elects to be spent in a recognized medical center for training inside or outside Jordan. It

also covers the concept of environmental health, study 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.

**Dermatology 1 (111503503) 2 credit hours**

This course covers the study of the disease 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 and seminars.

**Orthopaedics 1 (111502501) 5 credit hours**

This course study in 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.

**Otolaryngology (111502502) 2 credit hours**

This course cover 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

audiotesting 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 including lectures, seminars and group discussions.

**Ophthalmology (111502503) 2 credit hours**

This course study of eye diseases and trauma and refractive errors and ways of their diagnosis

and medical and surgical treatment including corrections of refractive errors, through a two week

period of clinical training including lectures, seminars and group discussions.

**Psychiatry (111503501) 2 credit hours**

The 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 psycho-organic 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 eight weeks in psychiatric outpatient clinics and hospitals through

lectures, seminars and group discussions, following the problem solving approach.

**Pediatrics – 1 (111504501) 9 credit hours**

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 the study of

diseases affecting children, 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.

**Gynecology and Obstetrics - 1 (111505501) 9 Credit hours**

This course covers the study of 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 caesarean section. In addition, diseases of pregnancy, fertility,

ectopic and pathological pregnancy, birth control and contraception are covered. The course is

executed through programmed clinical training, lectures seminars, and group discussion.

**6th year**

**General Surgery-2 (111502601) 9 credit hours**

This course involves the training of students in outpatient clinics, specialized units and operating

rooms covering the study of the clinical manifestations of diseases, their diagnosis and treatments

in addition to postoperative follow-up. The course is delivered through clinical training, tutorials

and seminars.

**General Internal Medicine -2 (111503601) 9 credit hours**

This course involves the training of students in outpatient clinics and specialized units covering

the study of the clinical manifestations of diseases, their diagnosis and treatment. The course is

delivered through clinical training, tutorials and seminars.

**Pediatrics – 2 (111505601) 9 Credit hours**

This course covers pediatric diseases, methods of treatment and caring 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.

**Gynecology and Obstetrics-2 (111505601) 9 Credit hours**

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, obstetrics operation room in addition to seminars and group

discussions.