**University of Duhok**

**College of Medicine**

**Academic year 2021-2022**

**The Syllabus**

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**Forward**

It is an honor to be the dean of the college of medicine in Duhok University. The college of medicine is one of the colleges of the University of Duhok which has been established in 1992 to provide knowledge and well trained doctors to serve Kurdistan region.

One of the major tasks of the college leader is to follow and update the curriculum. Curriculum development includes a variety of activities around the creation of planned curriculum, pedagogy, instruction and delivery methods for guiding student learning. Nowadays most of the instructors incorporate field work and learning through firsthand experience, to help students understand theory, develop skills, integrate and build tacit knowledge, develop meaning in places and work with peers and experts in alternate settings.

I have dedicated all my efforts to improve the educational effectiveness and to develop better ways for evaluation and assessment of the curriculum and academic programs. Plenty of models are abound for this purpose, but the priority is placing student learning and success at the core. All can be achieved when you insist that assessment criteria are tailored to the disciplines.

For the academic year (2018-2019), a major improvement in medical education of our college that we changed the teaching system from the classical one to a new, more professional one named the Integrated System of Medical Education and started applying it in the first year. This system is better than the classical one and the outcome is much better as more professional doctors will be graduated. We hope to continue with this system successfully for the sake of medical students and future doctors.

I am pleased to forward the recent updated curriculum of Duhok College of medicine.

I hope all the best and prosperity for our students

**Yours**

**Former Dean**

**Prof. Dr. Qasim H. Abdullah**

**Email:** [qasim.hasso@uod.ac](mailto:qasim.hasso@uod.ac)

[qha\_70@yahoo.com](mailto:qha_70@yahoo.com)

**Tel: 00964750 450 6580**

**University of Duhok**

**College of medicine**

**Vision, Mission and Objectives**

**Vision**:

Our vision is to recognize the College of Medicine as an institution of excellence, among the leading medical colleges in the region and the world and to be an effective partner to improve the health situation in the province of Duhok.

**Mission**:

Our College is a governmental scientific institution utilizing advanced concepts of medical education to graduate competent physicians capable of meeting their community needs

**Objectives:**

1. to graduate doctors who are:
2. Knowledgeable, skillful and able to address the health needs of their society.
3. Concerned with the issues of equity, quality and relevance in providing health care.
4. Decision makers
5. Adhered to the ethical standard in their practice.
6. Able to be an active team leader.
7. Effective educator within the community
8. Good health promoter and practitioner of preventive medicine.
9. Able to recognize the importance of research in enhancing health standard of the population.
10. A believer in continuing medical education as a tool of keeping good standard of skill and knowledge.
11. To conduct researches targeted at solving common problems in the community.
12. To provide opportunities for wide range of postgraduate studies leading to higher degrees for doctors in the region.
13. To contribute in spreading and updating medical knowledge and skills among doctors through continuous medical education
14. To be the main source of medical expertise and service delivery for the province through active participation of the staff in hospitals and health centers.

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**M.B.Ch.B Phase I**

**University of Duhok/College of Medicine**

**2021-2022**

**First year syllabus: (Integrated system)**

**First Semester (S1):**

|  |  |  |  |
| --- | --- | --- | --- |
| Subjects | Total hours | | Total units |
| **Theory** | **Practical** |
| Medical biophysics | **30** | **45** | **5** |
| Computer | **30** | **30** | **4** |
| Scientific debate | **60** | **-** | **4** |
| Kurdology | **60** | **-** | **4** |
| English language and Terminology | **60** | **-** | **4** |

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**Medical biophysics (theory)**

**Hours Per week: 2 hours**

**Total No. of hours: 30 hours**

|  |  |
| --- | --- |
| Topics | Hours |
| Introduction of medical physics module and the basic quantities, units and vectors. | 2 |
| Physics of respiratory system | 4 |
| Physics of skeleton | 2 |
| Physics of pressure system of the Body | 2 |
| Energy, Heat, Work and Power of the Body | 2 |
| Sound and ultrasound in medicine | 2 |
| Physics of ear and hearing | 2 |
| Physics of the Cardiovascular system | 2 |
| Physics of light and laser and their medical applications | 2 |
| Physics of eye and vision | 2 |
| Bioelectricity | 2 |
| Radiation in Medicine | 4 |
| Nanotechnology in Medicine | 2 |

**Medical biophysics (Practical)**

**Hours Per week: 3 hours**

**Total No. of hours: 45 hours**

|  |  |
| --- | --- |
| Topics | Hours |
| Temperature Measurements | 3 |
| Ohm’s Law and Human Resistance | 3 |
| Blood Pressure Measuring (Sphygmomanometer) | 3 |
| Spirometry | 3 |
| Optics of the Human Eye | 3 |
| ECG | 3 |
| EEG | 3 |
| EMG | 3 |
| Endoscope | 3 |
| MRI | 3 |
| CT - Scan | 3 |
| X-Ray | 3 |
| Laser | 3 |
| Audiometer | 3 |
| Oscilloscope | 3 |

**Subject: Computer (theory)**

**Hours Per week: 2 hours**

**Total No. of hours: 30 hours**

|  |  |
| --- | --- |
| Topics | Hours |
| Overview of the ICDL, Basic concept of IT, Basic operation system concepts and file management, Computer Types, Computer Parts (Computer Software Types, Computer Hardware Parts),Computer Performance, Storage Capacity Measurements, The main types of Storage Media, Input & Output Devices, print management . | 4 |
| Computer Network Types, The Internet Parts, Email types, Email Management, Web Browsers, Internet Protocols, File Transfer Protocol, Internet Services, HTTP, WWW, Address types, Address parts, web search engine, Client, Server, Network Media, Network Operating System, Network Topologies, IP Addressing, [Uniform resource locator](http://en.wikipedia.org/wiki/Uniform_resource_locator), Concept of Firewall, Share Data over Network, Intranet, Extranet, Data Transfer over Network, Different Internet Connection Services, The Characteristics of Broad band, [Wi-Fi](http://en.wikipedia.org/wiki/Wi-Fi) vs Bluetooth, Cookies, Security on the Web, Outlook. | 6 |
| Using the Computer and managing Files (Operating System: Windows XP, Windows 7), GUI (Graphical User Interface, Application Software, Word Application, Spreadsheet Application, Presentation. | 4 |
| The concept of Information Security, Viruses types, Virus protection, Infection targets and replication techniques, Recovery strategies and methods, Antivirus software, Viruses and the Internet) | 4 |
| Introduction to medical informatics | 1 |
| Health Information System | 1 |
| Bioinformatics | 1 |
| Consumer Health Informatics and Tele-health | 1 |
| Electronic Health Record | 1 |
| Evidence based medicine | 1 |
| Big data in Medicine | 1 |
| Clinical Decision Support | 1 |
| Imaging Systems | 1 |
| Computerized Physician Order Entry | 1 |
| Medical robotics | 1 |
| Cybermedicine | 1 |

**Subject: Computer (practical)**

**Hours Per week: 2 hours**

**Total No. of hours: 30 hours**

|  |  |
| --- | --- |
| Practical Sessions | Hours |
| Computer Parts: Hardware, software. | 2 |
| Using the Computer and managing Files (Operating System: Windows XP, Windows 7), Firewall, Control Panel. | 4 |
| Network Configuration, Email, Web Browsers, Web Search Engine, Modem Network, IP Addressing, (URL) [Uniform Resource Locator](http://en.wikipedia.org/wiki/Uniform_resource_locator), Concept of Firewall, Share Data over Network, [Wi-Fi](http://en.wikipedia.org/wiki/Wi-Fi) . | 6 |
| Microsoft Office (Word) | 6 |
| Microsoft Office (Power Point) | 6 |
| Microsoft Office (Excel) | 6 |

**Subject: Scientific debates (theory)**

**Hours Per week: 4 hours**

**Total number of hours: 60**

|  |  |
| --- | --- |
| **Subject-titles** | **Hours** |
| Introductions of Critical thinking & Scientific Debates + Examples with discussion. | 2 |
| A Thinker's Vocabulary + Four Aspects of Critical Thinking. | 2 |
| Features of ideal critical thinker, (15 features) + How to achieve development in thinking ,stages required for development as a critical thinker | 2 |
| The 9 strategies of critical thinking.1st strategy (Use wasted time),2nd strategy (A problem a day),3rdstrategy (Internalize Intellectual standards) | 2 |
| 4th strategy (Keep an Intellectual journal), + 5th strategy (Reshape your character), + +6th strategy (Deal with your Egocentrism)+7th strategy (Redefine the way you see things)+ | 2 |
| 8th strategy(Get in touch with your emotions)+9th strategy (Analyze group influences on your life)+ the three interwoven strategies + final conclusion. | 2 |
| The five Thinking Styles + explanation with discussion.+ Improve your communication through matching their thinking styles + Key Take Away | 2 |
| How to use the five thinking styles + Types of thinking . | 2 |
| Reasoning. (Definition) + ( The 18 Types), explanation + examples | 2 |
| The fourteen {Global Top Science Questions} those required Scientific Debate. | 2 |
| Logic & Critical Thinking. (Why should you become a critical thinker?). | 2 |
| What is an Argument (Definition, consistency, uses)+ The Two kinds of Arguments. | 2 |
| How to evaluate an Argument + The ultimate goal of logic is to evaluate argument. | 2 |
| What is a Good Argument (Deductive /valid or invalid) +(Inductive/strong or weak). | 2 |
| The Ideal Method to deal with the problem (Identify, Define, Explore, Act, Look back to evaluate effects). | 2 |
| Fundamentals of Logic and Critical Reasoning. (I think therefore I am.) . | 2 |
| Ask questions / Ability to ask on target questions is one quality of a good critical thinker. | 2 |
| What are Stupid questions / Do not ask such silly questions. | 2 |
| Common Decision Making Problems + How to overcome these problems. | 2 |
| Critical Thinking Skills (Always be reasonable). + Examples & Discussion | 2 |
| Why College Encourages Critical Thinking. (The gift a college can give you is an open mind). | 2 |
| Academic Debates/ Introduction + Short History + Academic Debate Formats + Debate- Skills | 2 |
| Plagiarism + Paraphrasing + Summarizing + Quoting .( Definitions , Why & when to be used )+ Note Taking | 2 |
| Negotiation & Persuasion skills + Time Management + Posters , Reports & Presentations | 2 |
| Health & Safety(Definition, Goals, Strategies, First Aid, Policies + Procedures approaches , H. &S Hazards ) | 2 |
| Health & Safety programs , Occupational Health & Safety, Avoidable Workplace Health and Safety Hazards | 2 |
| Education and Awareness, WORKPLACE SAFETY RECOMMENDATIONS THAT WORK | 2 |
| STEPS TO IMPROVING HEALTH & SAFETY, Core Elements of the Safety and Health Program Management Guidelines + Successful Health and Safety Management | 2 |
| Fire safety in the workplace, Fire risk assessments, Fire safety and evacuation plans, Fire safety equipment, + Smoking at work. | 2 |
| TOTAL HOURS = {58 HOURS + 2 Hours Practical session on Fire Extinguish}= 60 Hours | |

**Subject: Kurdology (theory)**

**Hours Per week: 4 hours**

**Total No. of hours: 60 hours**

|  |  |
| --- | --- |
| **Topics** | **Hours** |
| Kurdology: |  |
| ميَذوويا كوردان يا كةظن (نةذادىَ كوردا، ناظىَ كوردستانىَ ديروكىَ دا) | 60 |
| ميَذوويا كوردان (كورد ل سةردةمىَ ئيسلامىَ) |
| ميَذوويا نوىَ (كورد وشةرىَ ضالديران 1514ز) |
| ميَذوويا نوىَ (ميرنشينيَن كوردييَن سةربةخو( بهدينان \_ سوران\_ بابان\_بوتان) |
| ميَذوويا نوىَ (ريَكةفتناما كوردى وعوسمانى سالا 1516ز) |
| ميَذوويا نوىَ(شورةشا سمكويىَ شكاك 1919ز) |
| ميَذوويا نوىَ (شورةشا شيَخ سةعيد ثيران 1925ز) |
| ميَذوويا نوى (شورةشيَن بارزان 1908 – 1946ز) |
| ميَذوويا نوى (كومارا مهابا دسالا 1946رولىَ كورد وبارزانييَ نةمر دشورةشا 14 تيرمةهىَ سالا 1958 |
| جوكرافيا كوردستان و جهيَن شينوارى. |
| زمان و ئةلفة بيَ ييَن كوردى و ديالكتيَن زمانىَ كوردى |
| بزاظا روَذنامةظانيا كوردى (1898 – 1932ز) وديروكا ئالايىَ كوردستانىَ |

**Subject: English Language and Terminology (theory)**

**Hours Per week: 4 hours**

**Total No. of hours: 60 hours**

|  |  |
| --- | --- |
| **Hours** | **Topics** |
| 4 | Introduction to medical terminology |
| 4 | Basic elements of a medical word |
| 4 | Suffixes |
| 4 | Prefixes |
| 2 | Singular and plural endings |
| 4 | The human body |
| 4 | The skeletal system terminology |
| 4 | The digestive system |
| 6 | The cardiovascular system |
| 4 | The respiratory system |
| 4 | Body, lymph and immune system |
| 4 | The genitourinary system |
| 4 | The nervous system |
| 4 | Special senses |
| 4 | Abbreviations in medical terminology |

**First year**

**Second Semester (S2):**

|  |  |  |  |
| --- | --- | --- | --- |
| Module | Total hours | | Total units |
| **Large group (Theory)** | **Small groups teaching** |
| Molecules, Gene and Disease | **30** | **45** | **4** |
| Tissue of the body | **30** | **45** | **4** |
| Health and disease in population | **30** | **45** | **4** |
| Metabolism | **30** | **45** | **4** |
| Clinical Problem Solving 1 | **15** | **30** | **4** |
| clinical skills foundation course | **-** | **45** | **2** |

**Module**: Molecules, gene and disease

Hours Per week: 5 hours

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction to the Module  Introduction to the Cell  Amino acids &Proteins | **1** |
| Protein structure and functions  protein folding and function  Haemoglobin and myoglobin  Cell and biological molecules | **2** |
| Enzymes and Enzyme regulation  Enzyme activity  Regulatory Strategies  Protein Structure and function | **3** |
| DNA structure and chromosome organization  Nucleotide and nucleic acids  DNA .chromosomes and DNA replication  Enzymes and enzyme regulation | **4** |
| Transcription and Translation  What is a gene and transcription  The Genetic code and transcription  DNA Structure | **5** |
| Inheritance of Genes  Mitosis and Meiosis genotype and Phenotyes  Genetic linkage and pedigree analysis  Transcription and translation | **6** |
| Review and 1st formative assessment | **7** |
| Protein processing & targeting  Protein processing in cells, the secretary pathway.  Proteolytic processing within the secretary pathway; collagen  Inheritance of genes | **8** |
| Molecular Diagnosis  Molecular diagnosis  Molecular diagnosis 2  Inheritance of genes Part 2 | **9** |
| Mutations  Mutagenesis & its effects.  Detection disease-causing Mutations  Molecular diagnosis Part 1:Q1-6,8,10) | **10** |
| Chromosomal abnormalities  Numerical chromosomal Abnormalities  Structural chromosomal Abnormalities  Mutations & their consequences | **11** |
| Molecular diagnosis & Chromosomal abnormalities  Molecular diagnosis (part 2:Q7,Q9)  Chromosomal abnormalities | **12** |
| Case studies | **13** |
| Review & 2nd formative assessment | **14** |

**Module**: Tissues of the body

Hours Per week: 5 hours

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Methods in Light Microscopy  Cell Ultrastructure | **1** |
| Epithelial Tissues 1  Internal Surfaces of the Body | **2** |
| Epithelial Tissues 2  Skin 1 | **3** |
| Glandular Tissues & How Cells Secrete  Early Embryonic Development 1 | **4** |
| Early Embryonic Development 2  Bugs in the System | **5** |
| Connective Tissues 1  Early Embryonic Development 3 | **6** |
| Connective Tissues 2  formative assessment | **7** |
| Cartilage and Bone  Viruses | **8** |
| Ossification and Bone Disease  Early Embryonic Development 4 | **9** |
| Skin 2  Innate & Adaptive Immunity | **10** |
| Neurons, Nerve, Fibres & Peripheral Nerves  Fundamentals of the Autonomic Nervous system | **11** |
| Muscle  Disorders of Muscle | **12** |
| Blood Cells & Haemopoiesis  formative assessment | **13** |
| REVISION | **14** |

**Module**: Health and Disease in Population

Hours Per week: 5 hours

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction to the module | **1** |
| Defining the extent of medical problem | **2** |
| Measuring diseases in population | **3** |
| Sources of Variation | **4** |
| Cohort studies | **5** |
| Guest lecture: history, hygiene and hospital infection | **6** |
| Formative assessment | **7** |
| Case control studies | **8** |
| Causality or merely association | **9** |
| Randomized controlled trial | **10** |
| Reviewing the evidence | **11** |
| From research to practice | **12** |
| “Births, Deaths and Populations” and “Uses of Health Information” Lectures | **13** |
| module revision | **14** |

**Module**: Metabolism

Hours Per week: 5 hours

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Nutrition and body weight  Homeostasis, circadian rhythm  BMI, obesity, malnutrition | **1** |
| Cell metabolism, bioenergetics, energy balance  Carbohydrate metabolism 1  Diet analysis | **2** |
| Carbohydrate metabolism 2  Galactosaemia  TCA cycle and gluconeogenesis | **3** |
| Oxidative phosphorylation, oxidative stress  Glucose 6-phosphate dehydrogenase deficiency  Fuel storage and lipid metabolism | **4** |
| Lipid metabolism and transport  Protein and nitrogen metabolism  Hyperlipidaemia, hypercholesterolaemia | **5** |
| Control of energy metabolism  Drug metabolism  PKU, amino acid metabolism | **6** |
| Formative assessment | **7** |
| Introduction to endocrinology  Endocrine pancreas  Glycogen storage diseases, hypoglycaemia | **8** |
| Clinical presentation-Diabetes mellitus  Control of appetite, metabolic syndrome  Type 1 & type 2 diabetes | **9** |
| Thyroid gland  Clinical presentation :Disturbances thyroid function  Hyperthyroidism & hypothyroidism | **10** |
| Calcium metabolism  Pituitary & adrenal glands | **11** |
| Clinical presentation: Disorders of the adrenal cortex  Adaptations of metabolism  Cushing's & Addison's disease | **12** |
| Module revision | **13** |
| Review & 2nd formative assessment | **14** |

**Module: Clinical problem solving 1**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction to the module  Chest pain | **1** |
| **2** |
| Cystic Fibrosis | **3** |
| **4** |
| Sickle cell disease | **5** |
| **6** |
| Falls | **7** |
| **8** |
| Tuberculosis | **9** |
| **10** |
| Tired all the time | **11** |
| **12** |
| Preparing for assessments | **13** |
| Module review | **14** |

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| **Semester 2: Living with long-term conditions (LwLTC)** |

**Second Year syllabus (S3): (Integrated system)**

|  |  |  |  |
| --- | --- | --- | --- |
| Modules (S3) | Total hours | | Total units  (22) |
| **Large group (Theory)** | **Small groups teaching** |
| Mechanism of disease | **30** | **45** | **4** |
| Membrane and receptors | **30** | **45** | **4** |
| Cardiovascular | **30** | **45** | **4** |
| Musculoskeletal | **30** | **45** | **4** |
| Clinical problem solving | **30** | **45** | **4** |
| Clinical skills foundation course2 | **---** | **45** | **2** |

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**Module**: Mechanisms of diseases

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Cell Injury and Death | **1** |
| Acute Inflammation | **2** |
| Chronic Inflammation | **3** |
| Healing and Repair | **4** |
| Haemostasis and Thrombosis | **5** |
| Atheroma | **6** |
| Cellular Adaptations | **7** |
| Neoplasia I | **8** |
| Neoplasia II | **9** |
| Neoplasia III | **10** |
| Neoplasia IV | **11** |
| Acute Inflammation | **12** |

**Module**: Membrane & Receptors

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Membranes and membrane transport | **1-2** |
| Membrane excitability | **3-4** |
| Receptors and membrane turnover | **5-6** |
| Signal transduction in biological membranes | **7-9** |
| Drugs, receptors and the Autonomic Nervous System | **10-12** |
| Review & formative assessment | **13** |

**Module**: Cardiovascular system

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction to the CVS, anatomy of the heart in  situ and major blood vessels | **1** |
| The cardiac cycle. Development of the cardiovascular system. | **2** |
| The anatomy and development of the heart.Congenital heart problems | **3** |
| Role of the autonomic nervous system | **4** |
| Blood flow to tissues and its control | **5** |
| Overall control of the cardiovascular system | **6** |
| Cellular and molecular events in the heart /drugs | **7** |
| The electrocardiogram | **8** |
| Special circulations | **9** |
| Ischaemic heart disease | **10** |
| Heart failure | **11** |
| Shock | **12** |
| Review & formative assessment | **13** |

**Module**: Musculoskeletal system

|  |  |  |  |
| --- | --- | --- | --- |
| **Session 1:** | **The Science of the**  **MS System** | **Clinically**  **Applied**  **Topographical**  **Anatomy** | **Clinical**  **Presentations and**  **Review** |
| LT | 1.1 Module  Introduction |  |  |
| LT | 1 .2 The Skeletal  System: Bones &  Joints |  |  |
| SR |  | Tutorial:  Anatomico-  Medical  Terminology |  |
| DR |  | Introduction to  Dissection &  Pectoral Region |  |
| LT |  |  | 1.3 Clinical Overview and  Examination of the  Musculoskeletal System |

|  |  |  |  |
| --- | --- | --- | --- |
| **Session 2:** | **The science of the**  **MS System** | **Clinically applied**  **topographical**  **Anatomy** | **Clinical**  **Presentations**  **and Review** |
| LT | 2.1 Skeletal muscle:  Structure,  Morphology &  M echanics |  |  |
| SR |  | Osteology &  Radiology of Upper  Limb |  |
| SR |  | DR Briefing:  Brachial Plexus |  |
| DR |  | The Axilla |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Session 3:** | **The science of the**  **MS System** | **Clinically applied**  **topographical**  **Anatomy** | **Clinical**  **Presentations**  **and Review** |
| LT | 3.1 Development of  the Limbs |  |  |
| SR |  | DR Briefing: Back  of Trunk |  |
| DR |  | Back of Trunk |  |
| LT |  | 3.2 Functional &  Applied Anatomy  of Shoulder joint |  |

|  |  |  |  |
| --- | --- | --- | --- |
| **Session 4:** | **The science of the**  **MS System** | **Clinically**  **applied**  **topographical**  **Anatomy** | **Clinical**  **Presentations**  **and Review** |
| LT | 4.1 Dermatomes,  M yotomes&  Segmental Innervation  of UL & LL |  |  |
| SR |  | DR Briefing:  Front & Back of  Arm |  |
| DR |  | Front & Back of  Arm |  |
| LT |  | 4.2 The  Musculoskeletal  System |  |

**Module: Clinical problem solving 2**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| **Iron metabolism** | **1** |
| **2** |
| **Tired all the time** | **3** |
| **4** |
| **Falls** | **5** |
| **6** |
| **Fainting** | **7** |
| **8** |
| **Review** | **9** |
| **10** |

|  |
| --- |
| **Semester 3: Living with long-term conditions (LwLTC)** |

**Second Year syllabus (S4): (Integrated system)**

|  |  |  |  |
| --- | --- | --- | --- |
| Modules (S4) | Total hours | | Total units  (21) |
| **Large group (Theory)** | **Small groups teaching** |
| Urinary system | **30** | **45** | **4** |
| Respiratory system | **30** | **45** | **4** |
| Gastro-intestinal system | **30** | **45** | **4** |
| Health Psychology & Diversity | **30** | **45** | **4** |
| Forensic Medicine | **30** | **22 (Practical)** | **3** |

**Forensic Medicine (S4)**

|  |  |
| --- | --- |
| **Topics** | **Hours** |
| **تعريف الطب العدلي**  **واجبات الطبيب العدلي** | **45** |
| **الموت وعلاماته**  **علامات الموت الاكيدة – الصمل – البقع الموتة – التفسخ** |
| **الجروح – أقسامها – قطعية – رضية – مفتعلة**  **السحجات – الكدمات – أهميتها بالنسبة للطبابة العدلية** |
| **الجروح النارية – مميزاتها**  **تفريق الحالة الانتحارية من الجالة الجنائية** |
| **الحروق – أنواعها – النارية – الكهربائية – الكيمياوية**  **درجاتها – بالنسبة الى العمق ومساحة الجسم** |
| **الاختناق – أنوعها – الوسائل المؤدية له – كتم النفس – خنق باليد – خنق برباط** |
| **الغرق – علاماته الاكيدة – الشنق – انواعها**  **الخنق بغاز الفحم (اول اوكسيد الكاربون)** |
| **الجرائم الجنسية – اغتصاب – لواطة – مظاهر غشاء البكارة – تمزق حديث أم قديم** |
| **قتل الوليد (طفل غير شرعي) وسائل القتل، هل ولد الطفل حيا، ام ميتا. تشخيص ذلك.** |
| **التعريف ، طرق التعريف، اهميته** |
| **الاخلاق الطبية ، سرار المهنة الطبية ، كيفية المحافظة عليها** |
| **علم السموم** |
| **التسمم بلدغة الحية والعقرب**  **طرق التشخيص – وسائل المعالجة** |
| **التسمم بتناول الكوكائين والحشيشة علاماتها – معالجتها** |
| **الافيون ، كيف يحضر الافيون ، اخر مركباته، الهيروين** |
| **الادمان، المواد التي تؤدي الى الادمان**  **شروط الادمان والفرق بينها والتعود** |
| **التسمم بمعدن الزئبق، خطورته، تشخيصه، السمم بمعدن الرصاص، علامات التسمم المزمن به** |
| **التسمم بالمواد الكيمياوية – أنواعها – عوامل الاعصاب، الخانقة – غاز الخردل، VX** |

**Forensic Medicine (Practical sessions)**

|  |  |
| --- | --- |
| **Practical sessions** | **Hours** |
| **علامات الموت – الآنية – غير الاكيدة – الموت السريري – موت الدماغ** | **32** |
| **علامات الموت الاكيدة – برودة الجسم – الصمل الموتي – الانحدار الدموي – التفسخ** |
| **الحالات التي تعود الى الطب العدلي – جنائية – جروح – سموم – حروق – اختناق – جرائم جنسية** |
| **الجروح البسيطة – سحجات – اهميتها للطبابة العدلية – جروح نادرة – مفتعلة – وخزية – غيرها** |
| **الغاية من تشريح الميت**  **كيفية ارسال المريض الى الطبابة العدلية** |
| **للفحص الطبي العدلي**  **حالات رفض الفحص** |
| **الحالات التي ترسل الى الطبابة العدلية للتشريح عند الوفات** |
| **كيفية اجراء فحص القبور**  **فحص السوائل الحيوية – المنى** |
| **فحص اللواطة والاغتصاب والجرائم الجنسية** |
| **تشريح حالات الموت المجهول السبب** |
| **تعليم الطالب كيفية كتابة التقرير الطبي العدلي الاولي** |

**Urinary system: Module**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction to the Urinary system | **1** |
| Development of the Urinary system | **2** |
| Kidney as a filter | **3** |
| Control of plasma volume | **4** |
| Control of plasma osmolarity | **5** |
| Control of acid base balance | **6** |
| Control of Micturition | **7** |
| Pathology of the urinary system | **8** |
| Acute Kidney injury ( injury (AKI) | **9** |
| Urinary tract infections(UTI) | **10** |
| Chronic Kidney injury(CKI) | **11** |
| Review & formative assessment | **12** |

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**Respiratory System**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction to the Respiratory System | **1** |
| Anatomical Basis of Breathing | **2** |
| Mechanics of Breathing | **3** |
| Oxygen in the blood | **4** |
| Chemical control of breathing | **5** |
| Asthma | **6** |
| Midterm Formative assessment | **7** |
| Pneumonia | **8** |
| Lung Cancer | **9** |
| Introduction to Chest imaging | **10** |
| Respiratory system - History taking & Examination | **11** |
| Respiratory Failure & Overview | **12** |
| Review & formative assessment | **13** |

**Gastro-Intestinal system**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Overview of GI function/anatomy | **1** |
| Swallowing/ embryology | **2** |
| Surgical anatomy/ Hernias | **3** |
| Stomach 1 | **4** |
| Stomach 2 | **5** |
| Liver, Gallbladder and Pancreas 1 | **6** |
| Liver, Gallbladder and Pancreas 2 | **7** |
| Intestines 1 | **8** |
| Intestines 2 | **9** |
| Malignancies/Investigating the GI system | **10** |
| Signs and symptoms/Examination | **11** |
| Review & formative assessment | **12** |

**Health Psychology & Diversity**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction, stereotypes and Aging | **1** |
| Disability, Health related behaviour | **2** |
| Health behaviour, Adherence | **3** |
| Stress, Coping | **4** |
| Communication, cultural diversity | **5** |
| Child development & Communication | **6** |
| Formative , Psychological interventions | **7** |
| Death & bereavement, sexual | **8** |
| Personality | **9** |
| Debate, breaking  bad news | **10** |
| Review & formative assessment | **11** |

**Third Year syllabus (S5): (Integrated system)**

|  |  |  |  |
| --- | --- | --- | --- |
| Modules (S5) | Total hours | | Total units  (21) |
| **Large group (Theory)** | **Small groups teaching** |
| Health & disease in society | **30** | **45** | **4** |
| Selected component | **15** | **45** | **3** |
| Head and neck | **30** | **45** | **4** |
| Reproduction | **30** | **45** | **4** |
| Infection & immunity I | **30** | **45** | **4** |
| Clinical Skills Foundation | **--** | **45** | **2** |

**Student selected Component (S5)**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Critical appraisal | **1** |
| Clinical management of endocrine cases | **2** |
| Pathophysiology of surgical patients | **3** |
| Radiology in Medical emergencies. | **4** |

**Health & Disease in Society**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction, Quality and safety in Healthcare | **1** |
| Methods & Evidences | **2** |
| Inequality in health | **3** |
| Lay belief, health promotions | **4** |
| Chronic illness, quality of life | **5** |
| Screening | **6** |
| Resource allocation | **7** |
| Professional & professionalism | **8** |
| Patients-Professional relations, | **9** |
| Revision | **10** |

**Head & Neck**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Head (components+ Embryology) | **1** |
| Anatomy of Neck | **2** |
| Major arteries and veins of the neck | **3** |
| Embryology of face and nose | **4** |
| Temporal Region | **5** |
| Autonomic innervation of head and neck | **6** |
| Anatomy of orbit and eye | **7** |
| Eye disorders | **8** |
| Anatomy of Ear and its disorders | **9** |
| Anatomy and disorders of nose and paranasal sinuses | **10** |
| Anatomy of 5th. And 7th. Cranial nerves | **11** |
| Thyroid gland | **12** |
| Review & formative assessment | **13** |

**Reproductive system**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Origin of the sexes | **1** |
| Control of the reproductive processes | **2** |
| Puberty & abnormalities of menstruation | **3** |
| Female reproductive system | **4** |
| Male reproductive system | **5** |
| Infections of the genital tract | **6** |
| Review & formative assessment | **7** |
| Conception & contraception | **8** |
| Pregnancy | **9** |
| Fetal growth & development | **10** |
| Labour & Birth | **11** |
| Lactation & the breast | **12** |
| Review & formative assessment | **13** |

**Infection & Immunity-I**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| An introduction to Infection. | **1** |
| An Infection Model | **2** |
| Acute sepsis in the Emergency Department. | **3** |
| Hospital acquired infections. | **4** |
| Travel-related infections and emerging infections | **5** |
| Review & formative assessment | **6** |
| Blood borne viruses | **7** |
| Infections at a surface. | **8** |
| Infection prevention. | **9** |
| Chronic Infection | **10** |
| Review & formative assessment | **11** |

**Third Year syllabus (S6): (Integrated system)-End of Phase-I**

|  |  |  |  |
| --- | --- | --- | --- |
| Modules (S6) | Total hours | | Total units  (25) |
| **Large group (Theory)** | **Small groups teaching** |
| LwLTC | **---** | **120** | **4** |
| Infection & Immunity-II | **30** | **45** | **4** |
| Student Selected component | **15** | **45** | **3** |
| Nervous system | 30 | **45** | **4** |
| Clinical Pharmacology | 30 | **45** | **4** |
| Integrative | 30 | **45** | **4** |
| Clinical Skills Foundation | --- | **45** | **2** |

**Student selected Component (S6)**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Hematologic Lab investigations | **1** |
| Biochemistry Lab Investigations | **2** |
| Immunization Program in Iraq. | **3** |
| Communications skills | **4** |

**Clinical Pharmacology**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Clinical Pharmacology and Therapeutics:  Module Introduction | **1** |
| Pharmacology – General Principles 2 | **2** |
| Clinical Endocrine Pharmacology | **3** |
| Diabetic Pharmacology | **4** |
| Drugs treating Infection | **5** |
| Review & formative assessment | **6** |
| Drugs treating Arthritis | **7** |
| Pharmacology of Pain Management | **8** |
| Blood Pharmacology | **9** |
| Drugs and the Kidney | **10** |
| Drugs treating Cardiac Arrhythmias | **11** |
| Neuropharmacology | **12** |
| Review & formative assessment | **13** |

**Infection & Immunity-II**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Diagnostic Medical Microbiology | **1** |
| The Immunocompromised host | **2** |
| Upper and lower Respiratory infections | **3** |
| Foodborn microbial diseases:  Bacteria causing food poisoning. Gastroenteritis due to viral causes | **4** |
| Infection during pregnancy | **5** |
| Review & formative assessment | **6** |
| Infection in Neonates | **7** |
| Some helminthic infections. Some Protozoa infections | **8** |
| Fungal infections | **9** |
| Autoimmunity (Principle and cases) | **10** |
| Cytokines in diseases | **11** |
| Review & formative assessment | **12** |

**Nervous system**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Introduction to Structure and Development of Nervous System. | **1** |
| The Environment of the CNS. | **2** |
| Somatic Sensation & the Sensory Pathways. | **3** |
| The Motor System | **4** |
| Motor Disorders & Review of Patterns of Sensory Deficits. | **5** |
| Pain. | **6** |
| Neurotransmission & Its Clinical Correlates | **7** |
| Special Sense Organs – The Eye and the Ear. | **8** |
| Strokes, Head Trauma & CNS Imaging. | **9** |
| Neuroradiology | **10** |
| Consciousness and Its Disturbances | **11** |
| Higher Functions of the Brain | **12** |
| Integration & Pathology | **13** |
| Revision & Formative Assessment | **14** |

**Integrative**

|  |  |
| --- | --- |
| **Topics** | **Session** |
| Putting it all Together - Hypoxia | **1** |
| Fluid Balance and its Application to Intravenous  Fluid Therapy | **2** |
| Acid Base Balance | **3** |
| Professionalism in Clinical Practise | **4** |
| Cardiac Failure | **5** |
| Hypersensitivity Reactions | **6** |
| Defensive Failure and the  Bone Marrow | **7** |
| Neurology and Stroke | **8** |
| Anaemia | **9** |
| Blood and Bleeding  Dysfunction | **10** |
| The Liver in Health and Disease | **11** |
| Revision & Formative Assessment | **12** |

**M.B.Ch.B Phase II**

**University of Duhok/College of Medicine**

**2021-2022**

|  |  |  |
| --- | --- | --- |
| **Credits** | **Block** | **No.** |
| **8** | **Gastrointestinal care** | **1** |
| **8** | **Musculoskeletal care** | **2** |
| **8** | **Cardio-Respiratory care** | **3** |
| **8** | **Endocrine,Renal care** | **4** |
| **8** | **Mental care** | **5** |
| **3** | **Selected component** | **6** |
| **43** | **Total credits** | |

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| **Block: Cardio-Respiratory care** |
| The teaching of cardio-respiratory care aims to provide:  -Generic teaching in history taking and examination skills  -General, cardiovascular and respiratory medicine experience based on the activities of the teams  -Experience of acute medical emergencies admitted to the CDU/MAU and CCU |
| Vertical themes related to cardiovascular and respiratory medicine:  -Basic Sciences  -Pathology  - Microbiology  -Imaging  -Clinical Pharmacology  -Palliative Care  -Professionalism / Law and Ethics |

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| **Block: Musculoskeletal care** |
| By the end of the block students should be able to:  -identify the important causes of the following symptoms  -pain arising in multiple small joints  -pain arising in a solitary large joint  -pain and/or paraesthesia arising in the spine  -pain arising in soft tissues   Take a history considering physical psychological and social aspects.   Elicit selectively, normal and abnormal physical signs in the musculoskeletal  system.   Use investigations selectively and demonstrate an understanding of the use of  radiological investigations with regard to musculoskeletal disease   Use information sources and appraise evidence as appropriate for  musculoskeletal disease   Formulate and implement management plans with regard to prescribing mild,  intermediate and strong analgesics.   Offer advice for patients whose pain is not satisfactorily controlled by  pharmacological agents   Communicate effectively and sensitively in dealing with patients with chronic  musculoskeletal disease; and negotiate, where appropriate, alterations in  lifestyle that would be in the patient's best interest   Identify the extent and severity of injury following trauma   Perform basic first aid and resuscitative care in a patient with Musculo-skeletal  trauma   Identify and discuss with the patient potential risk factors for further injury and  the way they may be reduced   All of the above tasks should be based on a sound basic knowledge of applied  anatomy, physiology and pharmacology. |
| The student should be able to express the above competencies in the context of:   Musculoskeletal emergencies   Chronic inflammatory poly arthropathy   Autoimmune disease   Tumors affecting bones   Metabolic bone disease   Low back pain, sciatica and radicular pain   Degenerative joint disease   Childhood musculoskeletal problems |

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| **Block: Gastrointestinal care** |
| The topics involved in the GIT-Block are:  Approach to upper and lower GI bleeding.  -Approach to dysphagia.  -Approach to GERD.  -GI oncology.  -Morbid obesity.  -Approach to salivary gland diseases.  -Minimally invasive GI procedures and endoscopy.  -Approach to GB diseases and CBD stones.  -Approach to chronic liver disease.  -Approach to Acute & Chronic diarrhea.  -Approach to Malabsorption.  -Approach to dyspepsia and PU.  -Approach to perianal diseases.  -Non-neoplastic diseases of the colon (diverticulosis, angiodysplasia, volvulus,infectious colitis, …etc.).  -Approach to groin hernias.  -GI Radiology.  -Approach to intestinal obstruction.  -Approach to IBD.  -Approach to stomas.  -Approach to abdominal trauma.  -Approach to abdominal wall lumps and RIF masses.  -Approach to wound healing & incisional hernias  -Short bowel syndrome.  -Acute appendicitis and appendicular mass.  -Approach to hydatid disease.  -Approach to obstructive jaundice.  -Approach to splenectomy.  -Approach to acute and chronic pancreatitis.  -Approach to acute abdomen & intra-abdominal abscesses.  -Approach to Viral, bacterial, fungal and parasitic infections of the GIT (excluding hepatitis) |

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| **Block: Endocrine,Renal care** |
| Topics involved in the block: Endocrine,Renal care are:  -Diabetes Mellitus.  -Thyroid and parathyroid diseases.  -Pituitary and hypothalamus diseases.  - Adrenal gland diseases.  -Lipid disorders  -Acute and Chronic Kidney Injury  - Renal replacement Therapy  -Glomerular diseases.  -Disorders of Gonads |

**Fifth Year**

|  |  |  |  |
| --- | --- | --- | --- |
| Subjects | Total hours | | Total units |
| **Theory** | **Practical** |
| Medicine | **75** | **160** | **10** |
| Pediatrics | **30** | **80** | **5** |
| Surgery | **90** | **120** | **10** |
| Gynecology | **30** | **60** | **4** |
| Dermatology | **30** | **36** | **3** |
| Ophthalmology | **30** | **60** | **4** |
| ENT | **30** | **60** | **4** |
| Psychiatry | **30** | **36** | **3** |
| Radiology | **30** | **60** | **4** |

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Department: Medicine Subject: Medicine (theory)

Year: 5th year Hours Per week: 2.5 hours

Term: 1st & 2nd Total No. of hours: 75 hours

|  |  |
| --- | --- |
| **Topics** | **Hours** |
| **Neurology** :  Introduction to the nervous system  Stroke.  Epilepsy.  Demyelinating Disorders & Multiple sclerosis.  Headache.  Movement Disorders.  Spinal Cord Diseases.  Brain Tumor.  Idiopathic Intracranial Hypertension, Normal Pressure Hydrocephalus  CNS Infections.  Peripheral Nerve Diseases.  Muscle Diseases.  Neuromuscular Junction Diseases.  Neurodegenerative Diseases (Dementia, MND, Ataxic Disorders). | 35 hours |
| **Nephrology:**  Anatomy, physiology and investigation of renal system.  Acute Renal Failure.  Chronic Renal Failure.  Glomerulonephritis.  Interstitial Nephritis (Acute and Chronic).  Cystic disease of the kidneys.  Renal tubular acidosis.  Vascular diseases of the kidneys.  Urinary tract infections. | 9 hours |
| **Hematology:**  Anemia.  Megaloblastic anemia.  Anemia of chronic disease: management  Hemolysis.  Autoimmune hemolytic anemia.  Hemoglobinopathies.  Aplastic anemia.  Myeloproliferative disorders.  Hemostasis.  Leukemias.  Lymphoma. | 14 hours |
| **Oncology** | 4 hours |
| **Environment and Toxicology** | 4 hours |

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| **Rheumatology:**  Introduction  Back and Neck pain.  Osteoarthritis.  Rheumatoid arthritis.  Crystal induced arthritis.  Systemic lupus erythematosus (SLE).  Psoriatic arthritis and Behcets disease  Seronegative arthropathy.  Juvenile chronic arthritis.  Systemic vasculitis.  Myositis. | 9 hours |

Department: Medicine Subject: Medicine (practical)

Year: 5th year Hours Per week: 16 hours for 10 weeks

Total No. of hours: 160 hours

Clinical courses each course (10) week

|  |  |
| --- | --- |
| **Practical sessions** | **Hours** |
| Clinical session learn the student how to apply the subjects which take in theory to clinical practice ,and know how to do neurological examination , and how to examine the patient with rheumatological, renal and hematological disease, and deal with acute common emergency and management of common diseases. | 160 hours |

Department: Pediatrics Subject: Pediatrics (theory)

Year: 5th year Hours Per week: 1 hour

Term: 1st & 2nd Total No. of hours: 30 hours

|  |  |
| --- | --- |
| **Topics** | **Hours** |
| Neonatology | 12 |
| Hematology | 12 |
| Neurology | 6 |

Department: Pediatrics Subject: Pediatrics (practical)

Year: 5th year Hours Per week: 8 hours for 10 week

Total No. of hours: 80 hours

|  |  |
| --- | --- |
| **Practical sessions** | **Hours** |
| These are clinical sessions to establish the clinical features by history of examination, to enable the student to gain skills of clinical practice in different aspects of pediatric field, which focusing on the common health problems among children in our community. | 80 |

Department: Surgery Subject: Surgery (theory)

Year: 5th year Hours Per week: 3

Term: 1st & 2nd Total No. of hours: 90 hours

|  |  |
| --- | --- |
| **Topics** | **Hours** |
| **ORTHOPAEDICS:**  - Introduction to fractures.  - Principles of fracture treatment  - Fracture and dislocations of the upper limb  - Fracture and dislocations of the lower limb  - Fractures of the pelvis  - Introduction to orthopedics  - Diagnosis and treatment of orthopedic disorders  - Osteomyelitis and septic arthritis  - Tuberculosis of bone and joint  - Osteoarthritis  - Osteochondritis  - Metabolic bone diseases  - Shoulder  - Elbow  - Wrist and hand (including hand infections)  - Hip  - Knee  - Ankle and foot (including foot infections)  - Spine  - Tumours of bone  - Peripheral nerve injuries | 30 |
| **Chest and Cardiovascular surgery** | 6 |
| **Urology**  - Symptomatology and investigations  - Congenital anomalies of the U.T.  - Traumatic injuries.  - Infections of the U.T.  - T.B. and Bilharziasis  - Calculus disease of the U.T.  - Renal failure and Transplantation.  - Tumors  - Urinary diversion.  - Infertility.  - Neurogenic bladder  - Hydronephrosis  - B.P.H.  - Ca- prostate.  - Testicular tumors  - Intrascrotal swellings  - Bladder neck obstruction  - Undescended testicles  - Urethral strictures  - Hematurea. | 26 |
| **Anesthesia** | 6 |
| **Plastic Surgery** | 4 |
| **Pediatric Surgery**  - Embryology of G.I. tract and current theories of G.I. tract anomalies & neonatal obstruction  - Congenital megacolon and imperforate anus  - Abdominal pain & G.I. bleeding & childhood  - tumors in children  - thoracic surgical problems diaphragmatic hernia and tracheo- sophageal fistula  - main pediatric urological surgical conditions  - congenital abdominal wall defects | 9 |
| **Neurosurgery**  - Neurological investigations  - Head injuries  - Intra cranial space occupying lesions  - Congenital abnormalities  - Spinal cord compression  - Surgical aspects of pain | 9 |

Department: Surgery Subject: Surgery (practical)

Year: 5th year Hours Per week: 24 hours for 5 weeks

Total No. of hours: 120 hours

|  |  |
| --- | --- |
| **Practical sessions** | **Hours** |
| Orthopedics:  - general orthopedic examination  - management of fractures and orthopedic problems  - specific joint examination  - Traumatology  - operative procedure  - pre and post operative care  - Splint and POP | 36 |
| Urosurgery: clinical examination and management of common urological surgical problems | 26 |
| Neurosurgery: Basic principles on the diagnosis and management of common neurosurgical problems. | 16 |
| Vascular surgery: clinical examination, investigation and management of common cardiovascular diseases. | 8 |
| Pediatric surgery: during the clinical course: the students should:  - Review the knowledge about the important pediatric surgical conditions mentioned in the course book regarding their incidence, pathology, clinical presentation, and management.  - Have a good basic clinical examination skill and good communication and thinking skills detect the common surgical problems and know their lines of management. | 18 |
| Anesthesia: Assessment of the patient preoperatively, the guidelines to achieve the evaluation and routine investigations needed preoperatively.  Management of airway  How to maintain anesthesia  Monitoring the patient  Intravenous cannulation and fluid administration  Local and regional anesthesia  Postoperative care "complications and their management" | 8 |
| Plastic surgery& burn: clinical training on subjects mentioned in the theoretical part (above) | 8 |

Department: Surgery Subject: Ophthalmology (theory)

Year: 5th year Hours Per week: 1 hour

Total No. of hours: 30 hours

|  |  |
| --- | --- |
| **Topics** | **Hours** |
| **Ophthalmology**  -Anatomy of the eye  -Congenital eye disorders  -Diseases of the conjunctiva  -Corneal injuries  -Diseases of the cornea  -Diseases of the iris and the ciliary body  -disease of the retina  -vascular disorder of the retina  -retinal dystrophy & degeneration  -Glaucoma  -Cataract  -Anatomy and diseases of the eye lids  -Anatomy and diseases of the naso-lacrimal apparatus  -Ocular motility and motility disorders  -Ocular emergency and trauma  -Squint  -The orbit  -The use of ophthalmoscope  -The eye in systemic diseases | 30 |

Department: Surgery Subject: Ophthalmology (Practical)

Year: 5th year Hours Per week: 6 hours for 10 weeks

Total No. of hours: 60 hours

|  |  |
| --- | --- |
| **Practical sessions** | **Hours** |
| Ophthalmology: clinical training on subjects mentioned in the theoretical part (above) | 60 |

Department: Surgery Subject: Otorhinolaryngology (theory)

Year: 5th year Hours Per week: 1 hour

Total No. of hours: 30 hours

|  |  |
| --- | --- |
| **Topics** | **Hours** |
| **Otorhinolaryngology**  - [Learning Objectives](http://www.bcm.edu/oto/studs/obj.html)  - [Introduction to Otolaryngology-Head and Neck Surgery](http://www.bcm.edu/oto/studs/intro.html)  - [Review of Anatomy](http://www.bcm.edu/oto/studs/anat.html)  - [Examination of the Head and Neck](http://www.bcm.edu/oto/studs/exam.html)  - [Audiology](http://www.bcm.edu/oto/studs/aud.html)  - [Otolaryngologic Emergencies](http://www.bcm.edu/oto/studs/emerg.html)  - [Common Diseases of the External and Middle Ear](http://www.bcm.edu/oto/studs/midear.html)  - [Inner Ear Disease: Hearing Loss](http://www.bcm.edu/oto/studs/innear.html)  - [Inner Ear Disease: Vertigo](http://www.bcm.edu/oto/studs/vertigo.html)  - [Facial Paralysis](http://www.bcm.edu/oto/studs/face.html)  - [Nose and Paranasal Sinuses, Olfaction and Taste](http://www.bcm.edu/oto/studs/nose.html)  - [Inflammatory Disorders of the Pharynx](http://www.bcm.edu/oto/studs/pharynx.html)  - [Salivary Gland Disorders](http://www.bcm.edu/oto/studs/saliv.html)  - [Disorders of Speech and Swallowing](http://www.bcm.edu/oto/studs/speech.html)  - [Head and Neck Tumors](http://www.bcm.edu/oto/studs/hnt.html) | 30 |

Department: Surgery Subject: Otorhinolaryngology (Practical)

Year: 5th year Hours Per week: 6 hours for 10 weeks

Total No. of hours: 60 hours

|  |  |
| --- | --- |
| **Practical sessions** | **Hours** |
| Otorhinolaryngology: clinical training on subjects mentioned in the theoretical part (above) | 60 |

Department: Surgery Subject: Radiology (theory)

Year: 5th year Hours Per week: 1 hour

Total No. of hours: 30 hours

|  |  |
| --- | --- |
| **Topics** | **Hours** |
| **J-Radiology**  - Introduction  - The esophagus  -Stomach and duodenum  - The small intestine  - The acute abdomen  -The colon  -The diaphragm  -The biliary tract  -Miscellaneous  - Genito-urinary Systems  I.V.U  -Bones  -Chest diseases | 30 |

Department: Surgery Subject: Radiology (Practical)

Year: 5th year Hours Per week: 6 hours for 10 weeks

Total No. of hours: 60 hours

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| **Practical sessions** | **Hours** |
| Radiology: clinical training on subjects mentioned in the theoretical part (above) | 60 |

Department: Obstetrics and Gynecology Subject: Gynecology (theory)

Year: 5th year Hours Per week: 1 hour

Term: 1st & 2nd Total No. of hours: 30 hours

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| **Topics** | **Hours** |
| - Embryology of the Reproductive System | 1 hour |
| - Anatomy of the Reproductive System | 2 hours |
| - Physiology of the Reproductive System | 2 hours |
| - Abnormality of Menstruation | 6 hours |
| - Gynecological Infections | 3 hours |
| - Diseases of the Vulva and Vagina | 2 hours |
| - Diseases of the Cervix | 3 hours |
| - Diseases of the Uterus | 2 hours |
| - Displacement of the Uterus | 2 hours |
| - Diseases of the Ovary and Fallopian Tubes | 2 hours |
| - Contraception | 2 hours |
| - Infertility | 2 hours |
| - Menopause and Hormone Replacement Therapy | 1 hour |

Department: Obstetrics and Gynecology Subject: Gynecology (practical)

Year: 5th year Hours Per week: 6 hours for 10 weeks

Total No. of hours: 60 hours

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| **Practical sessions** | **Hours** |
| - History – Theoretical Foundation of History Taking  History taking of gynecological patients (last menstrual period; gravida, para, abortion; chief complaint; history of present illness; past obstetric history; review of systems; gynecological history and menstrual history in detail; medical and surgical history; social history | 30 hours |
| - General and Gynecologic Examination  Examination of the breast; abdominal examination (superficial and deep palpation); examination of the vulva, bimanual and speculum examination (on model); laparoscopy | 30 hours |

Department: Medicine Subject: Dermatology (theory)

Year: 5th year Hours Per week: 1 hour

Term: 1st & 2nd Total No. of hours: 30 hours

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| **Topics** | **Hours** |
| Skin anatomy, histology &physiology | 1 |
| Primary and secondary skin lesions | 2 |
| Developmental & hereditary skin disease | 1 |
| Viral skin disease | 2 |
| Bacterial skin disease | 2 |
| Fungal skin disease | 2 |
| Parasitic skin disease | 1 |
| Allergic, irritant & atopic eczemas | 2 |
| Papulo squamous skin disease | 2 |
| Acne , rosacea | 1 |
| Urticarias &angioedema | 1 |
| Connective tissues disease and vasculitis | 1 |
| Reactive skin disease and purpuras | 1 |
| Skin disease due to physical agents | 1 |
| Immuno bullous skin diseases | 1 |
| Disorders of pigmentation | 1 |
| Diseases of skin appendages | 1 |
| Benign skin tumors , Premalignant and malignant non melanoma skin tumors , melanoma | 3 |
| Sexually transmitted infections | 1 |
| Topical therapy | 1 |
| Skin manifestations of internal disease | 2 |

Department: Medicine Subject: Dermatology (Practical)

Year: 5th year Hours Per week: 6 hours for 6 weeks

Term: 1st & 2nd Total No. of hours: 36 hours

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| **Practical sessions** | **Hours** |
| The practical sessions aim teaching the students the skills of taking good history, inspection of the skin , recognizing the different primary and secondary skin lesions , Evaluation and differential diagnose , also the treatment of particular cases presented to the students , introduction of the diagnostic tools and UV and teaching them the proper use of them | 36 |

Department: Medicine Subject: Psychiatry (theory)

Year: 5th year Hours Per week (1 hour)

Term: 1st & 2nd Total No. of hours: 30 hours

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| **Topics** | **Hours** |
| - Signs and symptoms in Psychiatry | 3 hours |
| - Cognitive disorders | 1 hour |
| - Substance Related Disorders | 2 hours |
| - Schizophrenia and related psychoses | 3 hours |
| - Mood Disorders | 3 hours |
| - Anxiety disorders | 3 hours |
| - Somatoform Disorders | 2 hours |
| - Eating disorders, Anorexia nervosa, Bulimia Nervosa, Obesity | 1 hour |
| - Impulse-Control Disorders | 1 hour |
| - Personality Disorders | 2 hours |
| - Sexual Dysfunctions, Paraphilias, and Gender | 2 hours |
| - Sleep disorders | 2 hours |
| - Psychotherapy, psychopharmacology and other biological therapy | 2 hours |
| **- Child Psychiatry**  Attention-Deficit and Disruptive Behavior Disorders  Pervasive Developmental Disorders  Elimination Disorders, Attachment Disorders and Mental Retardation | 3 hour |

Department: Medicine Subject: Psychiatry (practical)

Year: 5th year Hours Per week: 6 hours for 6 weeks

Total No. of hours: 36 hours

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| **Topics** | **Hours** |
| 1st session: History taking in Psychiatry | 36 |
| 2nd session: Mental State Examination |
| 5 sessions: case presentation and discussion (should includes the main psychiatric groups: Psychotic disorders, Mood disorders, Anxiety disorders and Somatoform disorders) |
| 2 sessions: child and adolescent psychiatry (in Mental Health Center) |
| Last session (10th session): clinical exam |
| Note: Each group has clinical psychiatry for 10 days (10 sessions). |

**Sixth Year**

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| Subjects | Total term hours | | Total units |
| **Theory** | **Practical** |
| Medicine | **-** | **432** | **14** |
| Surgery | **-** | **432** | **14** |
| Pediatrics | **-** | **360** | **12** |
| Obstetrics and Gynecology | **-** | **360** | **12** |

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Department: Medicine Subject: Medicine (practical)

Year: 6th year Hours Per week: 36 hours for 12 weeks

Total No. of hours: 432 hours

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| **Practical sessions** | **Hours** |
| These are clinical sessions to establish the clinical features by history and examination, to learn the student skills to be excellence in clinical practice also clinical session in emergency department to learn how to deal with acute emergencies ,also clinical session to learn how to do clinical procedures like CPR, lumber puncture, Paracentesis, I.V line......ext.  Detail clinical session on presentations, examination and management of common disease on our locality. | 432 hours |

**Emergency medicine training** involves teaching students of 6th year about the care patients with life-threatening illnesses requiring immediate medical attention. This involves initiating investigations and interventions to diagnose and treat patients in the acute phase and making decisions regarding a patient's need for hospital admission, observation, or discharge.

The syllabus includes the following conditions:

1. Acute hypoglycemic state
2. Diabetic keto- acidosis, hyperosmolar hyperglycemic state
3. Status epilepticus
4. Anaphylaxis
5. Acute coronary syndrome
6. Basic life support, advanced cardiac life support
7. Acid- base disturbances, Hyperkalemia
8. Shock state
9. Syncope
10. Aortic dissection
11. Toxic shock syndromes
12. Endocarditis
13. Tetanus
14. Approach to poisoned patients, CO poisoning, Bites and stings
15. Heat emergencies, hypothermia
16. High altitude disorders
17. Adrenal insufficiency
18. Transfusion therapy

Department: Surgery Subject: Surgery (practical)

Year: 6th year Hours Per week: 36 hours for 12 weeks

Total No. of hours:432 hours

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| **Practical sessions** | **Hours** |
| Surgical clinical teaching 12 weeks course in the surgical wards and theatre and emergency departments plus patients follow up ,case sheets , home works, journal club preparations.  Students in the sixth year should be involved in the clinical practice and actively share in the discussion on patients clinical conditions. Should attend daily clinical sessions in a twelve weeks course. During these sessions the student given a level of practical knowledge regarding:  - Interaction with patients  - Clinical examination technique  - Identification of clinical signs  - Interpretation of clinical signs  - Differential diagnosis  - Main lines of management  - Complications  - Tutorials and discussion on the common surgical problems faced by the doctors in the post graduate life.  The student is responsible of all the subjects clinical and theoretical taken throughout his learning schedule afforded by the department of surgery in the previous three years as mentioned above. The practical training for each week will be as follows  - 5 hours per day, 6 days a week in the wards including 8 hours per course in the operating theatre  - 1 hour per day 4 days a week seminars and tutorials and Journal presentation  **- Trauma syllabus for students :**  9 topics . Each topic need 2 hour session  In each session there will be 20 mint theory (refreshing of information.  1-Initial Assessment and Management  2- Airway and Ventilator Management  3- shock and circulatory failures  4-Thoracic Trauma  5- Abdominal and Pelvic Trauma  6-Trauma to the head and spine  7-Musculoskeletal Trauma  8-Geriatric Trauma, pediatric trauma and trauma in pregnancy  9-Transfer of critical patient to Definitive Care | 432 |

Department: Pediatrics Subject: Pediatrics (practical)

Year: 6th year Hours Per week: 36 hours for 10 weeks

Total No. of hours: 360 hours

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| **Practical sessions** | **Hours** |
| Daily Duties:  Each student is responsible for taking the history, physical examination, follow-up, and discussion about the management of his/her patients (each students is responsible for 12 beds) | 360 |
| Seminars:  Each student is responsible for preparing and presenting one seminar |
| Call:  Each student is expected to be in the emergency department in the afternoon/evening for 8 days during the course |
| Training in primary health care and family medicine  In family medicine and communication skills  The training will focus on important topics |

Department: Obstetrics and Gynecology Subject: Obstetrics / Gynecology (practical)

Year: 6th year Hours Per week: 36 hours for 10 weeks

Total No. of hours: 360 hours

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| **Practical sessions** | **Hours** |
| - Daily Duties:  Each student is responsible for taking the history, physical examination, follow-up, and discussion about the management of his/her patients (each students is responsible for 2 beds on the obstetric and gynecological ward during the course); they are also expected to present at least 4 cases to the senior | 360 |
| - Seminars:  Each student is responsible for preparing and presenting 2 seminars and journal clubs; in addition to the students’ seminars, the lecturers present how to deal with the patients, give seminars on family planning, instruments and tools used in obstetrics and gynecology |
| - Operative Theater:  Each student is expected to be in the operative theater once a week and receive training on the surgical instruments, threads, training how to suture on a model |
| - Calls:  Each student is expected to be in the labor room (1st stage and 2nd stage ward) in the afternoon/evening for 2 days per week as call for 4 weeks |