1. University Requirements

Skills of Holy Quran Recitation &Tajweed	يهدف هذا المقرر إلى : ١. حفظ نصف جزء عمّ من سورة الطارق إلى سورة الناس . ٢. معرفة أحكام التجويد الأساسية . ٣. استخراج أحكام التجويد الأساسية أثناء قراءة القرآن الكريم . ٤. تطبيق أحكام التجويد الأساسية أثناء قراءة القرآن الكريم . ٥. التزام الطالب بالآداب التي تعلمها خلال دراسته للمقرر .
English Language(1)	1. understand familiar words and very basic phrases about oneself, family and immediate surroundings when people speak slowly and clearly and repeat. 2. use simple phrases and sentences to describe where someone lives and about people he/she knows. 3. ask and answer simple questions on very familiar topics. 4. understand familiar names, words and very simple sentences, for example on notices and posters or in catalogues. 5. write a short, simple postcard, for example holiday postcards. Fill in forms with personal details, for example entering your name, nationality and address on a hotel registration form. 6. simply describe his/her family and other people, living conditions, his/her educational background and his/her present or most recent job.
Arabic Language	1. إتقان المهارات اللغوية: الاستماع، والتحدث، والكتابة، والقراءة، ومهاراتها الفرعية . 2.. تقويم النصوص المكتوبة أو المنطوقة وفق القواعد الأسلوبية والنحوية والإملائية. 3. التدرب على التواصل اللغوي الفعال مع الآخر. 4. توظيف القواعد النحوية والأسلوبية والإملائية في المواقف الاتصالية.
Communications Skills	فهم العمليات الأساسية في الاتصال الإنساني التعرف على آليات الإدراك الذهني ومفهوم الذات والعلاقة بينهما تنمية مهارات الاتصال الكلامي وغير الكلامي لدى الطلاب. تطوير وتحسين مهارة الاستماع الفعال لدى الطلاب. إكساب الطلاب المهارات اللازمة للاتصال الشخصي مع الآخرين تحسين قدرة الطلاب على فهم المبادئ الأساسية للاتصال في المجموعات الصغيرة. إكساب الطلاب مهارة كتابة السيرة الذاتية والرسائل والتقارير الإدارية وفق القواعد الصحيحة
Islamic Culture	1. إدراك عظمة الإسلام وشموليته وصلاحيته لكل زمان ومكان. 2. المساهمة في صياغة الشخصية المسلمة الوسطية. 3. تعميق الانتماء إلى الإسلام والاعتزاز به وتبنيه منهجاً للحياة. 4.تمكين الطالب من التعامل مع قضايا العصر من منظور إسلامي. 5.التعرف على العديد من مشكلات الشباب وحلولها. 6.إدراك مكانة المرأة في الإسلام ودورها في الحياة.

Critical Thinking	1- رفع كفاءة الطالب الجامعي في التعامل الواعي مع النصوص المكتوبة أو الدروس والمحاضرات التي يتلقاها ، والندوات وبرامج التلفاز وسائر الفعاليات الثقافية المسموعة، أو حتى في مجال التعامل مع الأحداث المختلفة الحياتية بطريقة أفضل في هذا العالم المعقد المتشابك ،سواء كان في المجال الثقافي النظري أو العملي التطبيقي، أو في المجال الاجتماعي أو السياسي أو غيرها من المجالات. 2- مادة التفكير الناقد تبني شخصا لديه استقلال فكري ، لا يلغي وجهات النظر الأخرى، بل يواجهها بالدليل والحجة المقنعة. 3. يتدرب الطالب من خلالها على المنهجية المنطقية عند النظر في أفكار الآخرين، وذلك من خلال الفهم والتحليل والتفسير والتقييم ثم التقويم بإبداء الرأي المؤيد أو المعارض والمعتمد على الحجة والدليل والبرهان. 3- تجعل المقرر الدراسي لطالب الجامعة سهلا في فهمه واستيعابه ، كما أنها تحسن وتطور من مقدرته على فهم محتوى المقرر الدراسي. 4- تؤسس الطالب تأسيسا متينا على كيفية كتابة البحوث والرسائل العلمية مستقبلا، من خلال ما يتعلمه من ضرورة تقييم آراء وأفكار الآخرين وإبراز شخصية الباحث من خلال تقويمه النهائي لآراء الغير استنادا إلى الأسباب والمقدمات والبراهين، كما تمنح الطالب القدرة على كتابة المقالات الهادفة التي تقنع الآخرين ولا تجبرهم على تقبلها جبرا. 5- مادة التفكير الناقد تساعد الطالب على أن يكون شخصية محبوبة تألف وتؤلف، فيتعامل مع الآخرين بعقلية متفتحة ، ويتجنب اتخاذ قرارات شخصية حمقاء مستعجلة يندم عليها لاحقا وقد يؤذي بها الآخرين. 6- من خلال استيعاب مادة التفكير الناقد يتجنب الطالب أن يكون (إمّعَه) يسير مع آراء الآخرين دون فحص وتمحيص وتحليل واستيثاق، فالطالب يتدرب من خلالها أن يكون وقافا تجاه أي رأي أو فكرة، وبالذات ونحن في عصر تزاحمت فيه مصادر المعرفة وتعددت مشاربها وتوجهاتها، وكل يهدف إلى التأثير على الآخرين ولو استخدم المغالطات والخدع ، ولا ننسى الهجمات الإعلامية المغرضة على عالمنا العربي والإسلامي والتي تستهدف كل فناته ومكوناته، وبالذات فئة الشباب، كما أن المكتبات قد احتوت مؤخرا على بعض المؤلفات التي تحمل عناوينا ظاهرها الرحمة وباطنها العذاب، وأيضا بعض المجلات والمواقع الإلكترونية على شبكة الانترنت التي قد تبث من الافكار والمفاهيم ما يراد بها غسل وتجيير عقول شبابنا العربي والإسلامي على النحو الذي تهدف إليه.
Leadership Skills Development	1- تحديد مفهوم القيادة مع بيان عناصرها. 2- التمييز بين الانماط النظرية والعلمية للقيادة. 3- تحديد الفرق بين المدير والقائد. 4- التمييز بين مهام القائد الجديد (القائد المطور- القائد الطبيب – القائد المهندس). 5- تحديد مفهوم الإدارة وعناصرها ووظائفها المختلفة. 6- الإلمام ببعض الأخلاقيات الهامة للقيادة والإدارة. 7- الإلمام ببعض المهارات الهامة للقيادة والإدارة. 8- ممارسة دور القيادة والإدارة على الواقع العملي، وتلافي بعض الممارسات المؤثرة على نجاحها.
English Language(2)	1. communicate in simple and routine tasks on familiar topics and activities. 2. understand phrases and common vocabulary on common areas e.g. personal and family information, shopping, the local area, and employment. 3. understand the main point in short, clear, simple messages and announcements. 4. read very short, simple texts. Find specific, predictable information in advertisements, prospectuses, menus and timetables. 5. understand short simple personal letters. 6. write short, simple notes and messages. 7. write a simple personal letter, for example thanking someone.
Computer Skills	▪ Educate the student the basic computer and information technology concepts, fundamental operating system functions, how protect the computer system from viruses. ▪ Familiarize students with common software applications and understanding of use the computer for Internet access and electronic communication. ▪ Enable the students to practice install and uninstall software applications.
Research Methodology	**1- يظهر معرفة بالعلم والمعرفة والبحث العلمي، ومناهجه.** **2- يكتسب مهارات تحديد مشكلة البحث، وكيفية مراجعة الدراسات السابقة، وتحديد العينة، واختيارها.** **3- يكتب خطة، وتقريرا بحثيا.** **4- يصمم أدوات لجمع المعلومات.** **5- يستخدم المكتبات العامة والمصادر والمراجع ، ويوثقها بصورة صحيحة.** **6- يحرص على الاستفادة من البحث العلمي في شؤون حياته المختلفة.**

Faculty Requirements	
This course enables the medical and para-medical student to be knowledgeable about Medical Bioethics and protect them and patients to avoid malpractice & medical errors.	Medical ethics
1. Enhance students' knowledge, skills and practice with basic principles of Biostatistics 2. Demonstrate different uses of Biostatistics in Medicine and researches 3. Differentiate the using of both types of Biostatistics 4. Enrich their capabilities to use such principles in scientific researches	Biostatistics
1. Expose medical students to structure and formation of medical terms. 2. Enhance their capabilities to understand different medical terms	Medical English
Department Requirements	
1. Give a student knowledge about nature of matter and its properties. 2. Provide a student with the most important concepts in chemistry. 3. Teach a student the periodic table and determination chemical elements. 4. Name common chemical compounds. 5. Enable a student to prepare and do some chemical experiments. 6.Enable the student to work as member team work skills.	General &organic chemistry
The goals of this course are for the student to: 1. develop a basic knowledge and understanding of the major integrating concepts of the biological sciences (chemical basis for life, cell theory, inheritance, anatomy and physiology); 2. develop knowledge of the practical aspects of the biology	Biology
1. **Provide the students with** basic concepts of **the anatomical position, planes and terms.** 2. **Unable the students to recognize the normal structure and function of skin, fascia and vessels .** 3. Learn the student the demonstration of the different types of muscles and joints of skeletal system. 4. Familiarize students with basic **of the different types of body systems.**	Anatomy
1) To provide student with a basic knowledge and understanding concerning the fundamental mechanisms of human life as a continuous process. 2) To provide the student with the knowledge about the theoretical principles outlined in the syllabus in relation to ongoing basic sciences. 3) To get the student the ability to perform certain clinical basic skills 4) To develop the basic skills and ethical behavior required for scientific research, as well as effective communication and team work attitude.	Physiology

Program Requirements

1. Know the special language of analytical chemistry. 2. Develop good experimental protocols to tackle analytical problems in the bio analytical area. 3. Interpreting and evaluating analytical results. 4. Comprehend the basic ideas of expressing analytical concentrations. 5. Demonstrate critical thinking, problem-solving, and decision making, when dealing with theoretical and practical chemical information in this course. 6. Work effectively as part of a team to collect data and/or to produce reports and presentations.	Analytical chemistry
1. Familiarize students with basic tissues and the extracellular matrices surrounding them: epithelium, connective tissues, including blood, bone and cartilage, muscles, and nerves. 2. Facilitate the integration of Anatomy with Physiology and Biochemistry. 1. Set the stage for further studies later.	Histology
To enable the student to identify the basic concept about the meaning ,tools and function of epidemiology. To describe the different levels of disease prevention and control. To enable the student to demonstrate type of study used in epidemiology. To enable the student to value the appropriate of study type used in epidemiology. To identify the natural history of disease, chain of infection and used it in disease prevention and control and diseases association and causation	Epidemiology
1. Provide students with basic knowledge about bacterial cell structure, taxonomy, replication, metabolism, genetics and mechanisms of pathogenesis. 2. Help students to understand how bacteria can affect human life . 3. Teach students how to stain, isolate, culturing bacteria and read biochemical tests in the lab. 4. Enable students to practice sterilization and other methods of microbial control . 5. Teach students different types of antibiotics and their mechanism of action . 6. Teach students how to use and maintain equipment and instruments in the microbiology lab.	Introduction to Bacteriology
1. Provide the students with a theoretical background about medical helminthology and medically important helminths. 2. Enable the students to integrate their basic knowledge of parasitic helminths in the appraisal of health problems and to propose effective approaches to their diagnosis, prevention and control. 3. Equip the students with the practical skills to identify and report the diagnostic stages of parasitic helminths. 4. Eable the students to effectively manage time, be involved in collaborative teamwork and use internet resources to learn about medical protozoology.	Medical Parasitology 1
1. **Provides laboratory students with knowledge about basic sciences of drugs and pharmacology.** 2. **Assist student to choose the suitable antibiotics according to the site of infections.** 3. **Enable student to distinguish between different infectious diseases affecting body.** 4. **Enable student to work alone or within team.**	Principles of Pharmacology
1. Enable the student to be oriented with the biochemical importance of biomolecules. 2. Enable the students to be understand structure and classification of carbohydrates, Lipids, proteins, enzymes, vitamins, nucleotides and nucleic acids. 3. Enable the student to be identify carbohydrates, Lipids, enzymes, proteins, nucleotides and nucleic acids. 4. Familiarize the students with basic principles of molecular biology and protein synthesis. 5. Make the student oriented with the physio-chemical basis of the biological systems, and related clinical problems.	Biochemistry 1
1- Provide an opportunity for the student to distinguish the molecular basis of cellular processes and interrelationships in living systems with an emphasis on eukaryotic systems; 2- Teach the student the introductory "language" and "dictionary" of molecular cell biology; 3- Enhance fundamental insights for the student to initiate and further develop the process of inquiry-based learning and discovery in science;	Molecular Biology and Genetics

the hematopoietic organs, blood cells formation, developing , regulation and function, id describe classic morphologic characteristics at each stage of maturation for the e, neutrophil, monocyte, lymphocyte and thrombocyte 3. Recognize the RBC requirement for developing, Hb synthesis. and synthesis of each Hb types in all human life etc 4. Understand the anemia classification ,causes, mechanism and clinical picture 5. Explain and apply of anemia laboratory investigation and lab. Findings, blood cells morphology (Normal)and abnormal and evaluate their importance in diagnosis of anemia	Hematology 1
1. Provide students with knowledge about Gram positive bacteria, normal habitat, diseases they cause and their mode of transmission . 2. Enable students to understand the mechanisms of pathogenesis, virulence factors, and control measures. 3. Teach students how to perform laboratory techniques used to diagnose Gram positive bacteria. 4. Enable students to practice quality control and quality assurance in microbiology lab.	Medical Bacteriology 1
1. Provide a foundation of basic immunological mechanism of the specific and non specific immunity. 2. Understand the process of immune response 3. Understanding the etiologies, mechanisms and features of the immunological diseases including, hypersensitivity, autoimmune disease and immunodeficiency.	Immunology
1. Enable the student to illustrate and/or describe the metabolic pathways of macronutrients and nucleotides. 2. Provide the students with knowledge about the hereditary and acquired metabolic disturbances and their biochemical laboratory and clinical outcomes. 3. Learn the student how to point out the bioenergetics of the concerned metabolic pathways under different physiological circumstances and their integrator regulations with other working metabolic pathways. 4. Enable the student to perform some biochemical test to estimate serum levels of glucose, total proteins, albumin, cholesterol and uric acid by colorimetric methods 5. Make the student able to interpret medical laboratory results.	Biochemistry 2
1. Provide the students with a theoretical background about medical protozoology and medically important protozoa. 2. Enable the students to integrate their basic knowledge of protozoa in the appraisal of health problems and to propose effective approaches to their diagnosis, prevention and control. 3. Equip the students with the practical skills to identify and report the diagnostic stages of protozoan parasites. 4. Enable the students to effectively manage time, be involved in collaborative teamwork and use internet resources to learn about medical protozoology.	Medical Parasitology 2
1- This introductory course provides the students with the essential basic scientific knowledge required to understand in an integrated manner the structure and functional deviations from the normal in the various body systems and organs. 2- To familiarize students with the basic pathology. 3- To make the students understand the etiology, pathogenesis and pathologic manifestation of disease process	Pathology
1). Introduce the students to common cases of poisoning, the sources of poisoning and the causes of poisoning. **2). Familiarize students to different analytical methods of analyzing different poisons particularly those of medical importance and those in common use.** **3). EnableStudents at least to detect commonly used household poisons by applying the available methods and laboratory apparatuses.**	Toxicology
1. Recognize the hereditary and acquired hemolytic anemia and their investigation 2. Explain the white blood cells formation and function ,morphology (Normal) and abnormal 3. Recognize the white blood cells disorders benign and malignant 4. Carry out the most diagnostic blood tests for the WBC disorders benign and malignant 5. Write meaningful blood report with correct units and normal value	Hematology 2
1. Provide students with knowledge about species of each Gram negative genera, diseases they cause, mode of transmission. 2. Enable students to understand the mechanism of pathogenesis, virulence factors, and control measures. 3. Teach students how to perform laboratory techniques used to diagnose Gram negative bacteria. 4. Enable students to practice quality control and quality assurance in microbiology lab.	Medical Bacteriology 2

1. Provide the student the knowledge about blood component and antigen – antibodies, nature and role, the production of A, B, and H antigens and Secretors and Non secretors, Bombay and Para-Bombay blood group and understanding Kell, Lewis Duffy, MNS ,Kidd, importance etc. 2. Apple to understand the biochemistry of the ABO system and the weaker subgroups, ABO Typing, Explain the importance of the RHD and RHCE loci and D antigen variants 3. Enable the student to recognize the blood donation types, deferrals , pre donation tests. 4. Understanding the main methods of blood compatibility tests, cross matching, Abs screening testing for infectious disease markers, etc. 5. Improving the skills of apheresis ,keeping and transporting blood components for daily and longtime uses 6. Understanding the new technology of cross matching, irradiated blood component etc 7. Familiarize the students with the major categories of transfusion reactions, bacterial contamination and allergic transfusion reactions and how to prevent them .	Blood transfusion
1. To provide an overview of the role of a clinical biochemistry laboratory in assisting diagnosis and monitoring disease states of patients. 2. Understand the principles of clinical biochemistry related to health and disease. 3. To enable the students to point-out hereditary and acquired metabolic disturbances and their biochemical laboratory and clinical outcomes. 4. Describe the role of plasma proteins and the application of protein separation technologies. Separate plasma proteins by different methods. 5. Perform and interpret routine clinical testing and describe the levels of various analyses, i.e., blood glucose, blood lipids, blood electrolytes, liver function tests, kidney function tests.	Clinical chemistry 1
1. The course aims to provide an advanced knowledge of the principles of clinical chemistry by illustrating the metabolism and function of hormones. 2. The course will allow students to develop practical skills to carry out clinical studies in given clinical conditions. 3. **Upon completion** Students **should** be able to evaluate analysis results by means of controls and reference ranges	Clinical chemistry 2
1. **Explain** the platelets structure ,function and disorders . 2. **Listing** the coagulation factors. 3. **Understanding** the role of coagulation factors function and disorders. 4. **Define** the clotting mechanism . 5. **Carry out** the most diagnostic blood coagulation tests. 6. **Write** meaningful blood report with correct units and normal value.	Hematology 3
1. Enhance the knowledge, skills and experience of individuals working in the field of medical mycology via distance and reflective learning, a series of practical classes and a research project. 2. Provide knowledge in all aspects of medical mycology including the isolation and identification of fungal pathogens. 3. Improve the skills of the student on the modern methods of diagnosis of medical fungi. 4. Enhance the knowledge of epidemiology and changing spectrum of fungal disease and antifungal chemotherapy. 5. Provide the student with appropriate ethical and professional education necessary for dealing with medical mycology laboratory.	Medical Mycology
1. **Provide students with knowledge on the structure of viruses, life cycle, classification, diseases they cause and mode of transmission.** 2. **Enable students to understand the different mechanisms of viral pathogenesis.** 3. **Enable students to perform basic and advance laboratory diagnostic tests for viruses.** 4. **Help students understand the principles of prevention and control measures for viral diseases.**	Medical Virology
1. Enable the students understand the principles and tissue preparation steps for diagnosis different tumors under light microscopy of histopathology lab. 2. Allow the understand to know structure, classification and characteristic of basic human tissues types. 3. Learn the students the gross structure of human organs.	Histo - pathology technique

4. Provide the students with the skills of managements and solving problems during practical training. 5. Understand preparation of different solutions and stains. 6. Make the students able to deals with machines and equipment of histopathology lab.	
1. Provide students with components of laboratory management system and the principles of laboratory management activities. 2. Clarify the role of managing and supervising in a clinical laboratory and the related skills that have to be acquired and practiced in such a setting. 3. Demonstrate how safety regulations have to be integrated into clinical laboratory management, practices and how to develop protocols for quality assurance purposes. 4. Learn the student the quality of testing methods, setting up standards and validate test performance specifications. 5. Adopt the guidelines for procedures, calibration methods and equipment performance. 6. Illustrate the role of laboratory systems in laboratory data management.	Quality Control & Laboratory Management
a) Recognize Lab tests priorities terms, and the role of the anticoagulant materials in the laboratory b) Describe the automation in hematology and its benefits in blood diseases approach c) Recognize the Workup for diagnosis of leucocytes benign and malignant disorders and the steps and evaluation of blood disorders diagnosis d) Understanding the Bone marrow examination and importance in diagnosis of blood disorders e) Understanding The Chemistry tests for Anemia Diagnosis - f) Recognize the correct way how reported the cases	Diagnostic hematology
1. Enable the students to describe body fluids that may be analyzed for diagnostic purposes in the laboratory. 2. Enable the students to discuss macroscopic, chemical and microscopic testing of body fluids and explain the principles of each test. 3. Familiarizes the students with the major body fluids clinical impact. 4. Familiarize the students with the collection procedure, composition, size, formation, function and normal and abnormal characteristics of body fluids. 5. Enable the students to evaluate laboratory test outcomes and correlate test results with patient condition(s).	Body fluids
1. **Know the different types of clinical specimens.** 2. **How to deal with patients and specimens during sample collection.** 3. **Identification and diagnosis bacteria, viruses and fungi form different types of clinical specimens.** 4. **Understand the principles and procedures of routine microbiological assays.**	Diagnostic microbiology
1. Provide the students with a theoretical background about the various procedures used in the diagnosis of parasitic infections from different clinical specimens. 2. Enable the students to critically analyze and propose solutions that ensure the quality in diagnostic parasitology in the appraisal of health problems and to choose cost-effective diagnostic approaches. 3. Equip the students with the practical skills to implement various diagnostic procedures within the context of quality assurance and to identify and report parasites in different clinical specimens. 4. Enable the students to effectively manage time, be involved in collaborative teamwork and use internet resources for continuing self-learning.	Diagnostic parasitology
1. Enable the students to understand the principle and technique steps of all equipment of microbiology lab. 2. Learn the student to read and write a microbiological report. 3. Enable the student to practice in sample collection. 4. Provide the student the skills in managements and solving problems during practical training. 5. Engage the theoretical part with clinical and practical part in routine work.	Field Training in Microbiology
1. Provide the students with the essential knowledge about the proper collection, preservation, processing and examination of clinical specimens for parasites within the context of quality assurance in the medical laboratory. 2. Enable the students to critically analyze and propose solutions that ensure the quality in diagnostic parasitology in the appraisal of health problems and to choose cost-effective diagnostic approaches. 3. Equip the students with the practical skills to implement various diagnostic procedures within the context of quality assurance and to identify and report parasites in different clinical specimens. 4. Enable the students to effectively manage time, be involved in collaborative teamwork and use internet resources for continuing self-learning.	Field Training in Parasitology

To provide an overview of the role of a clinical biochemistry laboratory in assisting diagnosis and monitoring disease states of patients. Discuss macroscopic, chemical and microscopic testing of body fluids and explain the principles of each test. Describe major body fluids clinical impact. Understand the principles of clinical biochemistry related to health and disease. To enable the students to point-out hereditary and acquired metabolic disturbances and their biochemical laboratory and clinical outcomes. Describe the role of plasma proteins and the application of protein separation technologies. Separate plasma proteins by different methods. Perform and interpret routine clinical testing and describe the levels of various analyses.	Field Training in Biochemistry
1. To enable the students understand the principles and tissue preparation steps for diagnosis different tumors under light microscopy of histopathology lab. 2. To enable the students to be understand structure, classification and characteristic of basic human tissues types. 3. Practice in gross examination. 4. To enable the students have skills in managements and solving problems during practical training. 5. Engage the theoretical part with clinical and practical part in routine work. 6. To enable the students understand preparation different solutions and stains. 7. To enable the students understand deals with machines and equipments of histopathology lab.	Field Training in Histo-pathology
Know how specimen collected, handling and labeling properly, for blood disease investigation Carry out work up, for any tests of blood diseases manually and by blood cells analyzer Practice on the microscope for evaluation of blood cells morphology normally and in diseases Reporting the results properly Know the most important process for blood banking works ,donor selection, tests, blood collection and compatibility tests and reporting of blood transfusion	Field Training in Hematology
1. **Students understand the principle and technique steps of all equipments of immunology and serology lab.** 2. **Students will be able to know that all procedures must be done strictly based on manufacturing instruction.** 3. **Practice in sample collection** 4. Develop skills in managements and solving problems during practical training. 5. Engage the theoretical part with clinical and practical part in routine work.	Field Training in Immunology and serology
Provide the Radiology Technology and Medical Imaging students with the knowledge and skills needed to synthesize a research question. Acquire the student ability to work independently and as part of a team with colleagues and supervisors. Demonstrate the level of students effectiveness during documents writing, delivering oral presentations and interpreting results. Enable the students to conduct a scientific research. Enable the students to analyze the problem and develop an initial solution and recommendations.	Graduation project
Program Elective Courses	
Provide students with a basic knowledge about food/water microbiology including source of contamination, growth factors of micro-organisms in foods, pathogens transmitted via food and water and their related diseases. **Make them able to understand the significant role of microbes in food production and in food spoilage.** **Improve the skills of the student to distinguish between different types of microbial food poisoning.** **Provide students with lab skills to evaluate the quality of food and water before consumption by people .** **Enable students to understand the objectives of food and water sanitation.**	Bacteria of food and water

. Provide the student the knowledge about the biosecurity and biosafety and the relationship between them. . Enable the students to describe Biosafety and Biocontainment Concepts & Strategies. . Demonstrate components of a risk assessment for microorganisms (agent, host, environment, behavioral) . Provides the student with the general biosafety practices and procedures applicable to all laboratories handling infectious agents. . Learn the student how to construct laboratory waste management strategies and treatment methods for infectious agents.	Biosafety and biosecurity
learn the students the different methods and techniques for preparation of different specimens regarding paraffin, frozen and immunohistochemical sections and methods. Provide the detailed selection and functions of the monoclonal and polyclonal antibodies and their uses in Immunohistocytochemistry. Outline the different problems and troubleshooting in antigen retrieval, blocking and staining method in Immunohistocytochemistry . Provides the students with the quality standards of the practice with fundamentals of ethical and legal issues.	Immunohistocytochemistry
١ اكساب الطلبة معارف ومهارات حول الموضوعات التالية:- ١. طبيعة مفهوم علم النفس تعريفا وأهمية واهدافا وميادين . ٢. التعرف على الشخصية الانسانية و محددات السلوك الانساني. ٣. التعرف على الدوافع والانفعالات الانسانية. ٤. التعرف على العمليات الحسية والعقلية الاولية (الاحساس الانتباه الادراك) ٥. التعرف على القدرات العقلية الذاكرة الذكاء والتفكير .	Psychology