



**Ministry of Higher Education and Scientific Research**

**Supervision and Scientific Evaluation Apparatus**

**Department of Quality Assurance and Academic Accreditation**

**University of Warith Al-Anbiyaa / College of Medicine**

**Quality Assurance and Academic Accreditation Division**

# **Medical Academic Program Description**

Date of filling out the file: 2023

**Academic Description of the College of Medicine**

University of Warith Al-Anbiyaa

College of Medicine

Scientific Department: Medicine

File filling date: 2022/2023

**Signature**

**Dean of the College of Medicine:**

**Assist. Prof. Dr. Ahmed Abbas Al-**

**Signature**

**Deputy Dean for Scientific Affairs**

**Lec. Dr. Riyadh Abid Al-Rasool Hnewa**

The file has already been checked by:

Quality Assurance and University Performance Division

**Dr. Ali Abdulzahra Hadi**

**Signature**

Director of Quality Assurance and Medical Accreditation:

Prof. Dr. Talib Jawad Kadhim

**Date 2022/2023**

**Signature**

**Academic Programs**

Ministry of Higher Education and Scientific Research

Supervision and Scientific Evaluation Apparatus

Department of Quality Assurance and Academic Accreditation

Warith Al-Anbiyaa University / College of Medicine

Quality Assurance and Academic Accreditation Division

## CATALOG INFORMATION

### Location

- Iraq\ Karbala. Baghdad-Karbala Road Beside Sayeed Al-awsea
- Telephone: +964 7829647200
- Email: [medicine@uowa.edu.iq](mailto:medicine@uowa.edu.iq)
- Website: <https://uowa.edu.iq/arabic/medicine>
- Please contact M. Muhammed : Telephone: +964 7829647200 ; email : [medicine@uowa.edu.iq](mailto:medicine@uowa.edu.iq) if you have any questions or concerns regarding the information disclosed in this document.

University of Warith Al-Anbiyaa / College of Medicine was established in 2020/12/11, in Iraq \ Karbala city. Until the academic year 2023, the college offered three medical programs taught exclusively in English: it depends on a six-year program for graduates of secondary schools. Presently, this is available.

Warith Al-Anbiyaa College of Medicine (WAACOM) is part of an exceptional community of health care professionals, researchers, students and support staff. Academic staff includes high experienced scholars and lecturers, as well as foreign academics from the some European, and other countries. The WAACOM recognized by the Iraqi Ministry of Higher Education and Scientific Research in accordance with the letter reference No. (T.H.A/K 7542 on 2020/11/24).

The WAACOM and administration believe that adequate training of the modern healthcare professional requires the development of basic research skills. This emphasis on research is consistent with the university's tradition. Areas of focus are the fields of anatomy and its subdivisions: (histology, embryology, and genetics), biochemistry and molecular biology, immunology, microbiology, pharmacology, physiology, gastroenterology, and molecular pathology.

Clinical disciplines are also will be in the focus of coming years of research activities, including cardiovascular and respiratory diseases, hematology, nephrology, treatment of diabetes, endocrinology, neurology, oncology, cardio surgery, non-invasive and surgical gastroenterology, transplantology, and pediatrics. The level of research will be carried out by the college of medicine will try to be high. Researchers have published their works in some of the most prestigious international scientific journals.

The WAACOM requires that every graduate demonstrate effectiveness in clinical skills. The WAACOM will facilities offer ample opportunity for experiencing various healthcare techniques, treatments and outcomes.

Students of the college of medicine will also have the opportunity in their final year of study to complete elective rotations at various local and international universities.

Graduates of the medical programs will be eligible to apply for residency and postgraduate training programs at university teaching hospitals in various countries.

Set forth below is information briefly discussing topics related to WAAMC's courses of study, its faculty, facilities, and fees and expenses. By selecting the hyperlinks in each section, you will be referred to another location on the WAAMC's website with detailed information related to that subject.

## **Admission Policy**

Since its beginning in 2020, WAACOM has welcomed qualified international applicants from all over the world. Regardless of nationality, ethnicity or culture, all admitted students at WAACOM must meet exact academic requirements.

### **Six-year program**

Admission to the Warith Al-Anbiyaa University / College of Medicine, (WAACOM) depends on secondary school degree and Student guide for Admission to Private Universities and Colleges for the year 2022-2023. The Guide decided and published on the official website of the Ministry of Higher Education and Scientific Researches (MOHE). The Electronic Portal of the Department of Private Education, \ the Conditions and Controls for Students in Private Universities and Colleges, the General Principles that Adopt the electronic Application System for the two morning studies, the Admission Entries, the Mechanisms of Submission, the Limits for Submission, and the Admission Entries for the academic year 2022/23, can be followed through press on the link. [Microsoft Word - دليل الطالب v3.5 22 23.docx \(mohe.gov.iq\)](#)

The Department of Education and Residence to which the student will be able to apply in the electronic form. Press here. For information about the admission process to the WAACOM, please refer to: Announced Admission Criteria.

All admitted students have a Middle School Diploma and demonstrated proficiency in oral and written English, strong interpersonal skills, and minimum objective test scores. The examination committee of the WAACOM conducted at least one personal interview for all applicants.

For critical application dates, admission requirements, admission fees and application forms please refer to Four-Year Program Admission Criteria.

## **Programs, Courses and Other Educational and Training Programs**

The WAACOM's curriculum emphasizes basic sciences along with clinical training in each year of study. The WAACOM's experience will prepare a student for a number of career options in addition to medical practice. Many WAACOM graduates depending on the specific program will have distinguished themselves in the fields of research, public health and teaching, among others.

## Medical Academic Program for High School Students (Six-Year Program)

The academic program of WAACOM differs from many other medical school programs. The program focuses entirely on its students developing the necessary tools of a healthcare professional: skill in basic science, research capacity, and clinical skill. In the program: just the student remains in good standing, he will be accepted into the clinical program after initial years of study, like many other programs. The Six-Year Program is conducted entirely in the College of Medicine and in the hospital. Starting from the first year, the program requires that students gain clinical experience every year.

The Medical Academic Program is a long-cycle (undergraduate) program lasting 12 semesters. First three years of the program focus on the basic sciences and from the first year of study, the students are familiarized with ethics in medicine and communication with the patient. Clinical sciences are taught from the fourth to the sixth year of the program. A number of elective courses, is held in the course of studies. In order to pass a year,

In the website of the college there is an overview of the curriculum and a brief synopsis of all courses. The descriptions will include the major competencies that are students expected to acquire and list other essential elements and special features, including assessment.

### First-Year Courses:

The WAACOM all ways focus of the first year is on the basic sciences. Here, students learn the healthy function of the human body, including anatomy, medical physics, and medical chemistry, among others. Students are introduced to clinical skills and practice as well, concluding their first year with a summer clinical clerkship. This early focus on clinical skills maximizes the opportunities students have to experience different aspects and problems in providing health care. From the start of their studies, students expected to work at good level.

A student must complete all of the First-Year Courses to be promoted to the second year and to graduate.

### Second-Year Courses:

In the second year, the program continues to emphasize the basic sciences, however, the focus will, to some extent, shifts to the clinical applied aspect of the basic scientific information of human body. Accordingly, the curriculum of the second year emphasizes the clinical experience and examines broader questions facing health care professionals, like ethics and the impact of sociological and demographic forces on medicine. The broadening of subject matter does not diminish the program's overall focus on basic science. Students given two months for summer holiday for rest and prepare their self for the third year. A student must complete all of the Second-Year semesters to continue to the third year and to graduate.

### Third-Year Courses:

The third-year curriculum shifts its focus from basic sciences to clinical practice. Students begin, bedside teaching at the various hospitals (in Karbala city) courses such as Internal Medicine, Surgery. Students train in small groups providing them with extensive direct communication with

the patient to practice history taking and physical exams. They also are provided individualized assessment and focused support of skills. The curriculum of the third-year challenges program participants to explore and master large amounts of medical material. Students complete a summer clerkship to continue to develop their clinical skills. The third-year curriculum challenges participants in a program of exploration and mastery of large quantities of medicinal materials. The student must complete all scientific subjects during the third year or cross with two subjects (provided that he succeeds in two subsequent attempts with the lessons of the fourth stage) to continue the fourth year and graduation.

#### Fourth-Year Courses:

The fourth-year emphasizes clinical training, with bedside teaching the students are provided, with the opportunity to practice their clinical skills through regular patient interactions. The fourth-year curriculum includes a continuation of the core clinical courses. Students receive instruction in this specialty as they visit new departments, broadening their perspective on medical problems and their treatment. They also continue the of clinical practice in the pediatrics' hospital. Students also complete a summer clerkship to continue to develop their clinical skills.

A student must complete all of the Fourth-Year Courses to continue the fourth year and to graduate.

#### Fifth-Year Courses:

The fifth-year concludes the formal medical coursework. It also provides ample opportunity for further development of clinical skills. Students learn to tie the patient history and physical exam together with laboratory values and imaging studies leading to the diagnosis and treatment. This comprehensive teaching technique prepares students for real-life patient care.

Students also complete a summer clerkship to continue to develop their clinical skills.

A student must complete all of the Fifth-Year Courses to continue to the sixth year and to graduate.

#### Sixth-Year Courses:

The student concludes the final year of study by participating exclusively in clinical training. A student must complete all of the Sixth-Year Courses to graduate.

In the final year, having developed their basic clinical skills, students become more involved in the treatment of health conditions as interns. At the end of the fourth year, WAACOM students should be sufficiently skilled in clinical practice to perform well in any first-year residency program in any reputable hospital system.

Students are permitted to participate in clinical rotations falling outside the scope of the required clinical courses, yet reflecting the needs of modern medicine. Students may take elective clinical courses offered in the United States, Canada and the EU if the courses meet certain criteria.

Attending physicians and senior residents analyze student performance in this period.

A student must complete all of the P-4 courses to graduate.

The complete list of the WAACOM course materials as follows:

#### Clinical Training Abroad (6-6) – Rules and Regulations

1. Permission to do a part of the Clinical Training abroad applies to students in the final year of their study
2. Clinical training must be completed at a university hospital or a teaching hospital affiliated with a local Medical college.
3. The program of foreign rotation should include topics and procedures that are in the program of the respective clinical training at home School and should consist of the same number of weeks and hours or more. Clinical training blocks in Emergency Medicine, Family Medicine, OB/Gyn and Psychiatry must be completed in one location and overseen by one supervisor. Clinical training in Internal Medicine, Surgery, Pediatrics and Clinical Elective may be divided into two blocks, each min. two-week long.
4. The student should be in good academic standing- the student should pass all exams and fulfil all up-to-date course requirements before starting rotation abroad.
5. The student must meet all the obligations towards the School (tuition fee, completing summer clerkship etc.).
6. Permission to do Clinical Training abroad is given by Dean. Permission can be granted only after receiving: Application Form for Clinical Training with a program of clinical training (for details see table below) confirmed by the Host Institution
7. Credit for the course will be granted only when the Certificate of Completion and Student Evaluation Form are fully filled by a respective supervisor and sent directly to the college Office. The certificate should be supported with a program of clinical training that includes information on the procedures performed and the total number of hours devoted to a specific item of the program. The program should be signed by the student's supervisor.
8. Students are obliged to take all the required examinations on return to the School. The exams may take only upon the acceptance of the evaluation form and program by the course coordinator in abroad.
9. No tuition fee reduction is granted to students who do part of clinical teaching abroad.
10. The student may be charged additionally for obligatory classes that require individual scheduling beyond the class schedule.

## Deadlines:

1. Preliminary Clinical Training Class Schedule: to be completed by the end of June. The link to the online form will be sent to students at the beginning of June.
2. Final Clinical Training Class Schedule: to be completed by September 5<sup>th</sup>, 2022. The link to the form will be sent to students in the middle of August.
3. Final Individual Schedule: to be completed and sent back to the School Office by September 5<sup>th</sup>, 2022.

## Notes:

- The information for each student in the Final Clinical Training Class Schedule must correspond with their respective Final Individual Schedule.
- **The Final Clinical Training Class Schedule is the basis for scheduling clinical training in Kraków for each student.**
- Any discrepancies between these two forms will cause problems due to the limits of spots in each of the Departments.
- **Late submissions of the Schedules will hinder or disable the arrangement of Clinical Training at JUMC at the requested dates.**

## FORMS:

- Clinical Training Application Form
- Final Individual Schedule
- Certificate of Completion of Clinical Training
- Student Evaluation Form – Clinical Training

Clinical Training	number of wks	Units	
Internal Medicine	12	12	EXAM
Pediatrics	10	10	EXAM
Surgery	12	12	EXAM
Obstetrics and Gynecology	10	10	EXAM
Total	44	44	—

All years		
الوزن من المعدل التراكمي	Units	Year



5%	37	First
5%	36	Second
5%	36.5	Third
20%	46.5	Fourth
25%	42	Fifth
40%	44	Sixth
100%	242	Total

## Locations: Instructional, Laboratory and other Physical Facilities related to the Academic Program

Classes are taught throughout the WAACOM/ at University campus, depending on the subject matter. Required clinical rotations are conducted at the following owned and operated WAACOM University locations:

- AL-Imam Zain Al-Abiden Hospital
- Warith International Cancer Institute
- Khadija Al-Kubra Hospital

## Fees, Costs and Mandatory Health Insurance

For information regarding the cost of tuition, visit [here](#). For information regarding student housing, please refer to: [Dormitory Fees](#). For information regarding Non-EU Student Health Insurance, please refer to [Non-EU Student Health Insurance](#). For payment information, please refer to the [Tuition Fees](#) section. The cost of books and supplies is approximately 6 000 Euro per year.

Tuition fees

Rates

### Admission in 2023/24

Program	Year	Fee
MD program in English	<i>one through six</i>	12,500,000 ID /year

Names of Associations Agencies or Government Bodies that accredit, approve or license WAAMC

*Approval to operate:*

Ministry of Higher Education AND Scientific Researches. Department of Privet Higher Education.

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Scientific Department: Anatomy**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Ass. Prof. Salim Mahdi Al-Bassam**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Dean's Authentication**

**Program Name: - Anatomy**

**Program code: Ana-1**

**Number of units: - 8**

**Number of hours:- 8**

**Study stage: The first**

**First semester**

**Program Instructor: - Lec. Dr. Ali Majid**

### **Program Description:**

We teach the medical students about the anatomy of the oral cavity with its contents and clinical significance of the oral cavity anatomy. In addition, we teach the students the anatomy of the neck (beginning from the superficial structures to the deeper organs in layers (skin, superficial fascia and deep fascial layers). Then, the neck neurovascular structures, origin of the vessels & relations to each other with the clinical significance of each of them. Then the viscera of the neck (thyroid, parathyroid trachea & esophagus anatomy).

### **Program objectives: -**

Goals of teaching Thoracic anatomy:

Students will learn the new terms regarding oral cavity anatomy, the anatomy of the neck, normal site, structures & functions.

### **Program vocabulary:**

The oral cavity anatomy.

Salivary glands.

Neck anatomy:

Skin, fascial layers.

Muscles and triangles of the neck.

Neck vessels

Neck nerves.

Viscera of the neck.

### **Evaluation Methods:**

1 <sup>st</sup> trimester	5
Midyear Exam	20
2 <sup>nd</sup> trimester	5
Final exam practical	20
Final Exam theoretical	50
Total	100

Sudden daily  
exam inside the  
classroom.

Reports on  
topics selected

by the teacher, written by the student in his own handwriting, and sent to the teacher in the classroom.

Daily exam in anatomy laboratories.

Written monthly exam for the first semester.

### **Approved resources for the program:**

Grey`s Anatomy for medical students 4<sup>th</sup> Edition.1.

Snell`s Anatomy by region`s 10<sup>th</sup> Edition.2.

**Program Name: - Anatomy**

**Program code: Ana-2**

**Number of units: - 8**

**Hours: - 12**

**The academic stage: - the second**

**First semester**

**Program Instructor: - Lec. Dr. Ali Majid**

**Program Description:**

-Anatomy of oral cavity & Pharynx will enumerate & describe the contents, normal location & functions of each part of human oral cavity & pharynx.

Anatomy of Ear: parts of ear, boundaries & contents with the function of each content.

Anatomy of neck: will describe the human neck layer by layer, from skin to vertebrae. This will include the skin, fascial layers of neck, muscles, vessels & nerves of neck & cervical vertebrae.

**Goals of teaching Oral cavity & Pharynx:**

Students will learn the new terms regarding Oral cavity & pharynx.

Students will get theoretical plus practical information oral cavity and pharynx ( normal site, structures & functions).

Goals of studying Ear Anatomy:

Students will know the parts of human ear, normal functions & locations of each part with the nerves & vessels supplying the ear.

**Goals to study Neck Anatomy:**

Students will take theoretical plus practical notes inside the Anatomical lab. Regarding each part of human neck, enriched with clinical notes of practical significance regarding each subject of neck.

**Program vocabulary:**

Anatomy of oral cavity

Anatomy of Salivary glands.

Anatomy of Pharynx.

Anatomy of Ear. (External, Middle & Internal Ear).

Anatomy of Larynx.

Osteology of neck (Mandible, cervical vertebrae & Hyoid bone).

Neck Anatomy part-1(Skin, Fascial layers of neck).

Neck Anatomy Part-2(Muscles & Triangles of neck).

Vessels of Neck (arteries, veins & lymphatic system).

Nerves of Neck.

Viscera of Neck (Thyroid, parathyroid, Trachea & Esophagus).

### **Evaluation Methods:**

1 <sup>st</sup> trimester	5
Midyear Exam	20
2 <sup>nd</sup> trimester	5
Final exam practical	20
Final Exam theoretical	50
Total	100

Sudden daily  
exam inside the  
classroom.

Reports on  
topics selected

by the teacher, written by the student in his own handwriting, and sent to the teacher in the classroom.

Daily exam in anatomy laboratories.

Written monthly exam for the first semester.

### **Approved resources for the program:**

Grey`s Anatomy for medical students 4<sup>th</sup> Edition.1.

Snell`s Anatomy by region`s 10<sup>th</sup> Edition.2.

**Program Name: - Medical Biology**

**Program code: (Mbio1)**

**Number of units: -6**

**Hours: 60 theoretical hours + 60 practical hours**

**Study stage: The first**

**Semester: Annual**

**Program teacher: - M. Zahra Jaseb Hamid Al Mansouri**

**Description:**

Medical biology is a huge and vital topic. Understanding how the human body works, and the need to continuously develop and improve ways to diagnose and treat disease, is integral to improving the length and quality of our live. Medical Biology forms the bridge between basic research and clinical medicine.

**Program Objectives:**

The purpose of studying medical biology to concentrate on the basic principles in biology models of interest to study medicine and expand in the study of cell biology and genetics as a basis to study medicine in addition to study the normal tissue of the human body.

**Evaluation Methods:**

<b>Week No.</b>	<b>Theory</b>	<b>Practical</b>
1	Characteristics of life ,The cell cytoplasm, plasma membrane	Introduction
2	Mitochondria, Ribosomes, endoplasmic reticulum	Microscope I
3	Golgi complex, lysosome	Microscope II
4	Cytoskeleton	Histological Techniques
5	Cilia , basal body, centrioles	Lab. Exam
6	Nucleus, Cell Cycle, mitosis & meiosis	Buccal smear
7	Patterns of chromosomal inheritance	Blood smear
8	Patterns of genetic inheritance	Mitosis
9	DNA biology & biotechnology	Meiosis
10	Stem cells & Cloning , Cancer cells	Review
11	Review	Review
12	Review	Review
13	Review	Review



14	Review	Review
15	Covering Epithelium	Epithelium I
16	Glandular epithelium	Epithelium I I
17	Connective tissue cells	Epithelium I II
18	Connective tissue fibers	Connective I
19	Types of connective tissue	Connective I I
20	Cartilage	Cartilage
21	Bone tissue	Bone I
22	Osteogenesis	Bone II
23	Blood	Blood I
24	Blood	Blood I I
25	Bone marrow	Bone marrow I
26	Bone marrow	Bone marrow I I
27	Skeletal muscles	Muscles I
28	Cardiac & smooth muscles	Muscles II
29	Nervous tissue	Nervous
30	Nervous tissue	Review

### Evaluation Methods:

Assessment Marks	
First semester	5 marks
Midyear exam	20 marks
Second semester	5 marks
Final practical exam	20 marks
Final Theoretical exam	50 marks
Total Marks	100 marks

Sudden daily exam inside the classroom.

Reports on topics selected by the teacher.

Daily exam in the medical biology laboratory.

Preparation of seminars.

Written monthly exam for the first semester, mid-year, second semester and end of the year.

### Approved resources for the program:

1. Madder, S., S., and Windelelspecht, M., Human biology, 15th ed. Mc Graw – hill, USA, 2018.
2. Sylvia S. Madder, Biology, 6th ed. Mc Graw-Hill Education, USA, 1999.

3. Human biology by Madder, 12th edition.

4. Human histology

**Program Name: - Embryology**

## **Description of the academic program**

**This description of the academic program provides a necessary summary of the most important characteristics of the program and the learning outcomes expected of the student to achieve, demonstrating whether he has made the most of the available opportunities. It is accompanied by a description of each program within the program**

<b>University of Warth AL Anbiyaa</b>	The educational institution
Faculty of Medicine / department of anatolmy	Scientific Department / Center
Medical embryology	The name of the academic or professional program
Bachelor of Medicine and General Surgery	The name of the final certificate
annual	The academic system: Annual/programs/others
nothing	An approved accreditation program
nothing	other external influences
2023/1/30	The date the description was created

Curriculum objectives
1. Provides students with knowledge to be able to understand the main principle of human general and systemic embryological development
2. Provides students with basic knowledge about the main congenital anomalies and their risk factors and complications

1. Outcomes of the curriculum and method of teaching and assessment
<p>A. Learning objectives</p> <ol style="list-style-type: none"> <li>1. Teaching the basics of embryology</li> <li>2. Understanding the earliest steps in human germ cells formation</li> <li>3. Knowing the basics of embryological development and main body system formation</li> <li>4. Knowing the etiology and pathogenesis of main congenital anomalies</li> </ol>
Teaching method
1. Theoretical lectures
Assessment method
<ol style="list-style-type: none"> <li>1. Formative assessment</li> <li>2. Summative assessment</li> </ol>
<p>B. Emotional and social skills</p> <ol style="list-style-type: none"> <li>1. Collaboration and team work</li> <li>2. Time management and working in challenging situation</li> <li>3. Building self confidence</li> </ol>

2. Curriculum in detail  
Theory: 30 hours / year

theoretical		
1 <sup>st</sup> semester	The name of the unit or topic	required learning outcomes
Week 1	Cell division	<ol style="list-style-type: none"> <li>1. explain the main step in cell division, explain the gametogenesis</li> <li>2. analyse the main events in cell division, understand the gametogenesis</li> <li>3. learn how to differentiate between different cell divisions types and step</li> </ol>
Week2	Chromosomal anomalies	<ol style="list-style-type: none"> <li>1. explain the main chromosomal abnormalities</li> <li>2. understand the types and mechanism of main chromosomal abnormalities</li> <li>3. recognize the main feature of the major syndromes</li> </ol>
Week 3	gametogenesis	Explaining and knowing the main steps of oocytes and sperms formation Understanding the main anomalies of gametes formation
Week 3	Female reproductive cycles ovulation	Explain the main steps in the hormonal regulation of gametogenesis Understand the hormonal regulation of gametogenesis How are the FSH and LH play role in gametogenesis
Week 5	fertilization.	Explain the concept of fertilization and its step Understand the process of fertilization and its main results How is the zygote is formed by the union of sperm and oocyte
Week 6	Events of second week of development	Explain the main events in the second week of development Understand the main changes occur on the embryo in the second week

Week 7	Events of second week of development: (continue)	How is the blastocyst implanted in the uterine wall and what are the main events? Normal site of implantation Abnormal site of implantation
Week 8	Events of third week of development	Understand the three main germ layers and the formation of primitive streak How to recognize the main three germ layers
Week 9	Gastrulation	Explain the main steps of gastrulation and the fate of the epiblast
Week 10	Further developmental changes in trophoblast	Explain the main changes occur on trophoblast Understand the further developmental changes of the trophoblast How are the types of villi develop
Week 11	Embryonic period	Definition of embryonic period Understanding the main events of embryonic period How is the main germ layers give rise to the main body system
Week12	Fetal age assessment	Knowing the derivatives of the endoderm Understand the assessment of fetal age
Week 13	Fetal membrane	Explain the main events in the maturation of the placenta and fetal membrane
Week 14	Blood group and its effect on fetus	Understand the Erythroblastosis Fetalis and the effect of blood group on the fetus Understanding the placental membrane
Week 15	Fetal Membranes in Twins	understand the mechanism behind each type of twins
<b>Mid-year exam</b>		
<b>2<sup>nd</sup> semester</b>		
Week 16	Birth defects 1	Define the term of teratology Classify the causes of the birth defect and the main risk factors
Week 17	Birth defects 2	Explain the main preventive factors of birth defects Describe the main techniques of birth defects diagnosis
Week 18	Embryology of Respiratory system	<ol style="list-style-type: none"> <li>1. explain the steps of the respiratory system embrological development and the possible anomalies</li> <li>2. knowing the origin of the structures in the respiratory system and the result of expected anomalies</li> </ol>
Week 19	Embryology of GIT : Foregut	<ol style="list-style-type: none"> <li>1. knowing the origin of the structures and the parts of the foregut tube and the possible anomalies of each part.</li> </ol>
Week 20	Embryology of GIT : midgut	knowing the origin of the structures and the parts of the gut tube and the possible anomalies of each part.

Week 21	Embryology of GIT : hindgut	1. knowing the origin of the structures and the parts of the hindgut tube and the possible anomalies of each part.
Week 22	Embryology of CVS	1. explain the formation of the heart tube and its parts 2. Explain the main possible anomalies in the earliest event of cvs development
Week 23	Embryology of CVS	1. Explain the septation of the heart 2. knowing how is the heart tube transformed into 4 chambers heart
Week 24	Embryology of CVS	1. understand the main events in the development of the arterial system 2. describe the formation of different parts of the venous system
Week 25	Embryology of CVS	1. understanding the main events of fetal circulation 2. explain the main changes on the fetal circulation after birth
Week 26	Embryology of the head and neck	1. knowing the main changes that lead to the development of head and neck. 2. explain the possible anomalies of the head and neck development
Week 27	Embryology of skeletal system	1. explain the main events of the axial skeleton development 2. explain the derivatives of somites
Week 28	Embryology of skeletal system	1. explain the main events in the development of the skull 2. explain the main events of development of the face
Week 29	Embryology of skeletal system	1. explain the main anomalies of the fetal skeleton
Week 30	Revision	

Planning for personal development .3

Continuous follow-up of periodicals and scientific journals, and updating lectures

**Admission criteria (setting up regulations related to joining a college or institute) .4**

.5The most important sources of information about the program
Prescribed books
Langman medical embryology
Additional sources
Textbook of human biology



**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Arabic**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Ass. Prof. Salih majeed Ali**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Grade: First year / First semester**

**Hours/week: Theory 1 Total Hours:**

**Theory 15 Credits: 1**

### 1. Learning objectives

The program is designed to enable the student to:

1. Providing an integrated learning environment for achieving the set goals.
2. Developing and improving the level of academic and training programs.
3. Preparing all types of linguistic tests according to national standards and specifications.
4. Developing students through programs and support sessions.
5. Qualifying students to complete their undergraduate studies.

### 2. Syllabus

No.	Topics	Hours
1	Verbs of Appeal	1
2	Verbs of Actuality	1
3	noun and vocabulary	1
4	(Hamza) used for connection and disconnection	1
5	Connective names ( nouns)	1
6	Distinction verbs	1
7	Conditional Tools	1
8	Adjectives and alternatives	1
9	Cases of Verbs	1
10	Cases of Object	1
11	Cases of Absolute verb	1
12	Kana and its derivations	1
13	Indicative Nouns	1
Total		13

### 3. Instructional and learning methods and tools

The syllabus is given as lectures

### 4. Student assessment:

The minimum requirement of a student to pass is to achieve at least 50% of the total 100 marks assigned for the program. The marks are described as follows:

1. A midterm exam of 30 marks as short essay exam.
2. A final theory exam of 70 marks as short essay exam.

Students who fail to attain the 50% cut-off mark are required to re-sit for second trial examination similar to the final one. Failing in the second trial entails the student to repeat the academic year.

## **5. Books and references:**

1. Educational Syllabus
2. Syllabus Prepared by specialists profs in Arabic language
3. Some linguistic Books prepared by specialists

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa/ College of Medicine**

**Scientific Department: community**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Dr. Sabaa Abid\_Alrazaq**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Dean's Authentication**

<b>1- educational institution</b>
University of Warith Al-Anbiyaa/ College of Medicine
<b>2-Scientific Department / Center</b>
Family & Community medicine
<b>3-Academic or professional program name</b>
Human medicine
<b>4-Final certificate name</b>
Bachelor of Medicine and General Surgery
<b>5-Academic system (annual / programs / semesters)</b>
annual
<b>6- Semester/year</b>
year
<b>7-Available forms of attendance</b>
Actual mandatory attendance
<b>8-The number of study hours</b>
Total number of hours ..... 120 theoretical hours + 150 practical hours third stage ..... 30 hours theoretical + 30 hours practical Fourth stage. .... 90 theoretical hours + 120 practical hours
<b>9-Accredited Accreditation Program</b>
ACAMC
<b>10-Other external influences</b>
A teaching hospital, library, internet, community, doctors' syndicate
<b>11-Description creation date</b>
2022/2023
<b>12-Academic Program Objectives</b>

The program seeks to prepare a high-level medical staff capable of assessing the health needs

of the community, solving its medical problems and developing a healthy lifestyle.

### **13-Required program outcomes and methods of teaching, learning and assessment**

#### **➤ Cognitive goals**

1-Introducing students to the principles of family and community medicine and their relationship to the health system followed.

2 -Providing students with the knowledge to conduct appropriate studies to know the health problems that society suffers from, their causes, and how to use statistics and statistical tests to solve these problems.

3 -Emphasis on the preventive aspect of various diseases, especially in the field of nutrition and environmental problems.

4- Providing study and training opportunities and acquiring knowledge and skills in family and community medicine.

#### **17- Skills objectives of the program**

1-Providing students with special skills to know the health problems that society suffers from, their causes, how diseases are distributed and the influence of various factors in them, and to know the most appropriate ways and means to solve these problems.

2 -Providing students with basic skills to perform various statistical tests.

3- Providing students with the skills to measure the nutritional status of the population.

#### **• Teaching and learning methods**

1- Giving theoretical lectures

2 -Special practical laboratories to gain skills in solving statistical problems.

3 -Laboratory applications of nutritional measurements.

4- In-person and electronic blended education (via the Classroom platform).

#### **• Evaluation Methods**

1-Half-program and end-of-program

exams2- Sudden short exams

3-degrees of practical issues

#### **➤ Behavioral and value objectives**

1 -Gain the ability to optimally deal with medical records and statistics.

2- Acquiring the skill to deal ethically with participants in medical research, whether they are sick or healthy.

#### **• Teaching and learning methods**

1 -Giving theoretical lectures.

2 -Special practical laboratories to gain skills in solving statistical problems.

3-. Integrated, in-person and e-learning (via the Classroom platform).

• **Evaluation Methods**

- 1-Half-program exam
- 2 -Sudden short exams
- 3-degrees of practical issues
- 4- End of program exam

**14- The structure of the program for theoretical biostatistics / third academic level / firstsemester**

<b>Week</b>	<b>hours</b>	<b>Required educational goals</b>	<b>Unit name and/or topic</b>	<b>education method</b>	<b>Evaluation method</b>
1	1	Introduction & Definitions	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
2	1	Data Collection	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
3	1	Sampling Methods	biostatistics	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
4	1	Data Presentation	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
5	1	Measurements of Central Tendency	biostatistics	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)

6	1	Measurements of Variability	biostatistics	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
7	1	Range & Variance	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
8	1	Standard Deviation & Coefficient of Variation	biostatistics	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
9	1	Probability (Part 1)	biostatistics	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
10	1	Probability (Part 2)	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
11	1	Student's t-Test	biostatistics	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
12	1	Chi-square Test (Part 1)	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
13	1	Chi-square Test (Part 2)	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)



14	1	Correlation & Regression (Part 1)	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)
15	1	Correlation & Regression (Part 2)	biostatistic	The discussions are theoretical and practical lectures	Discussions, reports, tests and exams (theoretical and practical)

15- The structure of the program for practical biostatistics / third academic level / first semester					
Week	hours	Required educational goals	Unit name and/or topic	education method	Evaluation method
1	2	Introduction & Definitions	biostatistic	The discussions practical lectures	Discussions, reports, tests and exams (theoretical and practical)
2	2	Data Collection	biostatistics	The discussions practical lectures	Discussions, reports, tests and exams (theoretical and practical)
3	2	Sampling Methods	biostatistics	The discussions practical lectures	Discussions, reports, tests and exams (theoretical and practical)
4	2	Data Presentation	biostatistics	The discussions practical lectures	Discussions, reports, tests and exams (theoretical and practical)
5	2	Measurements of Central Tendency	biostatistics	The discussions practical lectures	Discussions, reports, tests and exams (theoretical and practical)

6	2	Measurements of Variability	biostatistics	The discussions practical lectures	Discussions, reports, tests and exams (theoretical and practical)
---	---	-----------------------------	---------------	------------------------------------	---

**15- The structure of the program/ third academic level / the second semester**

<b>Week</b>	<b>hours</b>	<b>Required educational goals</b>	<b>Unit name and/or topic</b>	<b>education method</b>	<b>Evaluation method</b>
1	2	Introduction & Definitions	nutrition	theoretical lectures	Discussions, reports, tests and exams (theoretical and practical)
2	2	Nutrients	nutrition	theoretical lectures	Discussions, reports, tests and exams (theoretical and practical)
3	2	Proteins	nutrition	theoretical lectures	Discussions, reports, tests and exams (theoretical and practical)
4	2	Fats & Lipids	nutrition	theoretical lectures	Discussions, reports, tests and exams (theoretical and practical)
5	2	Carbohydrates	nutrition	theoretical lectures	Discussions, reports, tests and exams (theoretical and practical)

6	2	Vitamins	nutrition	theoretical lectures	Discussions, reports, tests and exams (theoretical and practical)
7	2	Minerals	nutrition	theoretical lectures	Discussions, reports, tests and exams (theoretical and practical)

16- The structure of the program/ fourth academic level / the first semester					
Evaluation method	education method	Unit name and/or topic	Required educational goals	hours	week
Discussions, reports, tests and exams (theoretical and practical)	theoretical and practical lectures	general epidemiology	Introduction & Definitions	1	1
		Occupational medicine	Definition, History, and Objectives	1	
		Primary health care system	PHC System (Health & Population)	1	
		Practical/clinical aspects of the above topics	Practical / Clinical Training	4	
Discussions, reports, tests and exams (theoretical and practical)	theoretical and practical lectures	general epidemiology	Incidence & Prevalence	1	2
		Occupational medicine	Functions of Occupational Health Centers	1	
		Primary health care system	PHC System (Public Health & Principles of PHC System)	1	
		Practical/clinical aspects of the above topics	Practical / Clinical Training	4	
Discussions, reports, tests and exams (theoretical and practical)	theoretical and practical lectures	general epidemiology	Measurements of Risk	1	
		Occupational medicine	Heat	1	

		Primary health care system	PHC System (Al-Mata Declaration & Components of PHC System)	1	3
		Practical/clinical aspects of the above topics	Practical / Clinical Training	4	
Discussions, reports, tests and exams (theoretical)	theoretical and practical lectures	general epidemiology	Sources of Infections	1	4
		Occupational medicine	Cold	1	

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Computer science**

**File filling date: 2022/2023**

**Signature**

**Directory**

**Lec. Yassen Khudher**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Dean's Authentication**

**Grade: First year**

**Hours/week: Theory 2**

**Practical 2**

**Total Hours: Theory 30**

**Practical 30**

**Credits: 3**

### 1. Learning objectives

The program is designed to enable the student to:

1. It Introduce the boarder discipline of computer science to students basic familiarlycomputer Software and Hardware
2. It include practical introduction about fundamentals (OS) such as Windows 7
3. The program emphasizes on using applications (including MS-word, MS- Excel andMS-Power point

### 2. Syllabus

#### 2.1. Theory

No.	Topics	Hours
1	History of computer	1
2	Introduction to hardware	5
3	Introduction to software	5
4	Algorithms and flowcharts	2
5	Principle of Internet	2
6	Fundamentals of Windows 7	4
7	Introduction Ms-Words	3
8	Introduction Ms-Excel	3
9	Introduction Ms-power point	3
Total		28

#### 2.2.Practical

No.	Topics	Hours
1	Windows 7	4
2	Ms-words	8
3	Ms-Excel	8
4	Ms-power point	8
Total		28

### 3. Instructional and learning methods and tools

The syllabus is given through Lectures, practical, laboratory exercises.

### 4. Student assessment:

The minimum requirement of a student to pass is to achieve at least 50% of the total 100 marks assigned for the program. The marks are described as follows:

1. A first semester and midterm and second semester exam of 30 marks as short essay exam.
2. A final practical of 70 marks as practical application on computer exam.

Students who fail to attain the 50% cut-off mark are required to re-sit for second trailexamination similar to the final one. Failing in the second trial entails the student torepeat the academic year.

## **5. Books and references:**

1. Wempen, Faithe. Computing Fundamentals: Introduction to Computers, JohnWiley & Sons, 2014
2. Lambert, Joan, and Curtis Frye. Microsoft Office 2016 Step by Step. MicrosoftPress, 2015
3. Hennessy, John L., and David A. Patterson, Computer architecture: a quantitativeapproach . Elsevier, 2011.

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Scientific Department: Anatomy / Histology**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Ass. Prof. Salim Mahdi Al- bassam**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Dean's Authentication**



## Academic description of histology for the second academic level

This summary provides a summary of the most important characteristics of the scheduled and expected learning outcomes of student achievement that show whether or not he or she has made maximum use of learning opportunities is correlated with the program description.

<b>1-symbol</b>
<b>HIS205</b>
<b>2-Scientific Department / Center</b>
<b>Human anatomy</b>
<b>3-The number of study hours</b>
<b>Histology... 60 hours theoretical // 60 hours of practice</b>
<b>4-Academic Program Objectives</b>
<b>1-Distinguish the cell component using light microscopy.</b> <b>2 -Differentiation between different body tissues using a light microscope.</b> <b>3 -Connecting cell structure, structure and tissues.</b> <b>4 -The student participates in scientific discussions and presents them with confidence and consistency.</b> <b>5 -Students gain experience in examining samples with different magnifications by drawing illustrations for each type of cell.</b> <b>6- Keeping pace with scientific developments in the field of cells, tissues, and others.</b>
<b>• Teaching and learning methods</b>
<b>-1 Scientific and weekly surprise tests fixed.</b> <b>2 -In-class exercises and activities</b> <b>3- Guide students to some websites.</b>
<b>• Evaluation Methods</b>
<b>1 -Daily theory exams</b> <b>2 -Daily practical laboratory exams</b> <b>3 -Theoretical and practical exam for half of the program and the end of the program</b> <b>4- Oral exam</b>
<b>➤ Behavioral and value objectives</b>
<b>1 -Doctors can understand others and understand and treat pain</b> <b>2 -Doctors who can maintain an ethical standard and maintain medical information at a high level are considered.</b> <b>3 -Preparations enable doctors to give priority to the patient.</b> <b>4 -Preparing doctors who can take into account the human aspect of the</b>

**patient.5 -General skills, employing special motivation and personal development:**

**6 -Develop students' ability to deal with technical**

**means7 -Develop the student's ability to deal with**

**the Internet.8 -Develop the student's ability to deal with multimedia.**

**9 - Develop the student's ability to dialogue and debate.**

<b>6-The structure of the program for theoretical and practice histology /second academic level / the first Semester</b>					
<b>Week</b>	<b>Hours</b>	<b>Required educational goals</b>	<b>Unit name and/or topic</b>	<b>education method</b>	<b>evaluation method</b>
1	2 theoretical 2 practical	Microscopy & their types. Primary tissue & their role in formation of tissue.	Introduction to the histology	Lecture+ lab	General question discussion + exam
2	2 practical 2 theoretical 1	Teaching the student what is the meaning of tissue and its forms ,the cells which covered the body from outside and lining from inside .	Epithelial tissue	Lecture+ lab	General question discussion + exam
3	2 practical 2 theoretical	Modification unit for epithelial tissue. Exocrine glands & their classification.	Epithelial gland.	Lecture+ lab	General question discussion + exam
4	2 theoretical 2 practical	Identify the tissue which connect the tissue together and its types .	Connective tissue	Lecture+ lab	General question discussion + exam
5	2 practical	Identify the		Lecture+ lab	General

	2 theoretical	cells & fibers and its types	Cells of connective tissue		question discussion + exam
6	2 theoretical 2 practical	Identify the adipose cell and recognize it from other cell types	Adipose tissue	Lecture+ lab	General question discussion + exam
7	2 practical 2 theoretical	Identify the types of cartilage and its distribution in the body	Cartilage	Lecture+ lab	General question discussion + exam
8	2 thiooretical 2 practical	Identify the bone tissue and its types	Bone	Lecture+ lab	General question discussion + +exam
9	2 practical 2 theoretical	The central & peripheral nerves system	Nervous system	Lecture+ lab	General question discussion + exam
10	2 theoretical 2 practical	Identify the nervous tissue and its types and explains the nervous impulse reach to rest body	Nerve tissue	Lecture+ lab	General question discussion + exam
11	2practical 2 theoretical	Identify the types of muscles and differences between them as longitudinal and transverse section	Muscle tissue	Lecture+ lab	General question discussion + exam
12	2 theoretical 2 practical	Identify the blood vascular system and its main function and	Circulatory system I	Lecture+ lab	General question discussion + exam

13	2practical 2 theoretical	The types of artery and vein.	Circulatory system II	Lecture+ lab	General question discussion + exam
14	2 theoretical 2 practical	Identify the types, shape and function of blood cells and the number of each type.	Blood cell	Lecture+ lab	General question discussion + exam
15	2practical 2 theoretical	Identify the way of derived of the blood cell from stem cell and differentiate of a blood cell .	hematopoiesis	Lecture+ lab	General question discussion + exam

<b>7-The structure of the program for                      theoretical and practice histology /second academiclevel / the second                      Semester</b>					
Week	Hours	Required educational goals	Unit name and/or topic	education method	evaluation method
1	2 theoretical 2 practical	Identify the lymphoid organ and tissue responsible for immunity of the body	Lymphoid organ	Lecture+ lab	General question discussion + exam
2	2 practical 2 theoretical 1	Identify the digestive system and explain the digest and absorb in the organ of this system	Digestive system I	Lecture+ lab	General question discussion + exam
3	2 practical	Digestive Tract;	Digestive system II	Lecture+ lab	General

	2 theoretical	General structure, the oral cavity and tongue. Pharynx and esophagus.			question discussion + exam
4	2 theoretical 2 practical	Stomach and Small intestine Large intestine & appendix	Digestive system III	Lecture+ lab	General question discussion + +exam
5	2 practical 2 theoretical	Identify the organs which associated with digestive tract	Organs associated with digestive tract	Lecture+ lab	General question discussion + exam
6	2 theoretical 2 practical	Identify the parts of the respiratory system	The respiratory system I	Lecture+ lab	General question discussion + exam
7	2 practical 2 theoretical	Respiratory System; Nasal cavity, larynx and trachea.	The respiratory system II	Lecture+ lab	General question discussion + exam
8	2 theoretical 2 practical	Respiratory System The Lung Bronchial tree.	The respiratory system III	Lecture+ lab	General question discussion + +exam
9	2practical 2 theoretical	Identify the layers of the skin and the glands, hair and , nail	Skin	Lecture+ lab	General question discussion + exam
10	2 theoretical 2 practical	Identify The Urinary System The Kidney and blood supply.	The Urinary System I	Lecture+ lab	General question discussion + exam
11	2practical 2 thioretical	Identify nephrons Ureter, urinary bladder, urethra	The Urinary System II	Lecture+ lab	General question discussion + exam
12	2 thioretical	Identify the glands and its	Endocrine glands	Lecture+ lab	General question

	2 practical	structure			discussion + exam
13	2practical 2 theoretical	Identify the parts of the male reproductive and their structure	Male reproduction	Lecture+ lab	General question discussion + exam
14	2 theoretical 2 practical	Identify the parts of the female reproductive and its structure	Female reproductive	Lecture+ lab	General question discussion + exam
15	2practical 2 theoretical	Identify the ear and the eye	Photoreceptors and audio receptors	Lecture+ lab	General question discussion + exam

### 8-Infrastructure of histology for the second academic level

1-Required program books	-Human Anatomy and cell physiology by Mcgraw hill 17 <sup>th</sup> ed
2- main references (sources)	All human histology books and magazines
3- Recommended books and references (scientific journals, reports)	All human histology books and magazines
4- Electronic references, websites	<a href="https://themdjourney.com/20-best-histology-and-physiology-books-for-medical-students/#The_Anatomy_Coloring_Book">https://themdjourney.com/20-best-histology-and-physiology-books-for-medical-students/#The_Anatomy_Coloring_Book</a>

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Human Rights**

**File filling date: 2022/2023**

**Signature**

**Directory**

**Lec. Sabaah Mohammed**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Grade: First year**

**Hours/week: Theory 1 Total**

**Hours: Theory 15Credits: 1**

**1. Learning objectives**

- 1- The aim of teaching human rights to create distinguished students scientifically, culturally and morally, and to prepare the individual, citizen and good person in his homeland in accordance with the requirements of the social environment .
- 2 - Through the teaching of human rights, we seek to strengthen the values of citizenship in the students' hearts Because the student in the first place is a human before he is a doctor or an engineer
- 3- Instilling the spirit of citizenship and the formation of students on the basis of respect for the community and the defense of personal rights, political and intellectual focus on the importance of education in the assessment of creative capabilities.

**2. Syllabus**

No.	Topics	Hours
1	The meaning of the rights	1
2	Characteristics of the right	2
3	The target of a culture of human rights The international legitimacy of human rights	2
4	Human rights protection mechanisms	1
5	Civil and political of human rights	2
6	The right of life	1
7	Freedom of belief in the constitution of Iraq in 2005	1
8	The terms of reference of the Federal Court	1
9	The crime of genocide	2
10	Important of tolerance and peaceful coexistence after the victory over the enemy ISIS (DAISH)	2
Total		15

**3. Instructional and learning methods and tools**

The syllabus is given to the students as lectures.



#### **4. Student assessment:**

The minimum requirement of a student to pass is to achieve at least 50% of the total 100 marks assigned for the program. The marks are described as follows:

1. A first semester and midterm and second semester exam of 30 marks as short essay exam.
2. A final theory exam of 70 marks as short essay exam.

Students who fail to attain the 50% cut-off mark are required to re-sit for second trial examination similar to the final one. Failing in the second trial entails the student to repeat the academic year.

#### **5. Books and references:**

1. Political systems: D. Hamed hanon
2. Constitutional system in Iraq. D. Adnan Ajel
3. Constitution of Iraq in year 2005.

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Scientific Department: Internal Medicine**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Ass. Prof. Amir Amran**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

## Dean's Authentication

### Description of the academic program

This description provides a summary of the most important characteristics of the program and the learning objectives that the student is expected to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program.

<b>University of Warith Al-Anbiyaa/ College of Medicine</b>	Education Department <b>.1</b>
<b>Internal Medicine</b>	Scientific department <b>.2</b> center
<b>Internal Medicine</b>	Department <b>.3</b>
<b>Medicine and general surgery</b>	Name of the academic <b>.4</b> or professional program
Annual	The academic system:  Annual/programs/other
NCAMC	Accredited <b>.5</b> Accreditation Program
Teaching Hospital, library, internet, community, doctors' syndicate	other external <b>.6</b> influences
<b>25/2/2023</b>	date the description <b>.7</b> was prepared
<b>The objectives of the academic program .8 .8</b>	
<b>Giving a general introduction to internal diseases and how to communicate with patients for the purpose of reaching the correct diagnosis and how to start treatment.</b>	

Internal Medicine			Program name	.1
			Program No.	.2
Total	Practical	Theory	Credit Hours	.3
5 Units	60 Hours	45 Hours	Level and semester: third stage	.4
Not present			Prerequisite Programs	.5
Not present			Co-requisite	.6
Bachelor in Medicine and Surgery			Degree	.7
English			Teaching Language	.8
University of Warith Al-Anbiyaa			Place used for teaching	.9
Amer Omran			Name of Instructor	.10
30/11/ 2022 Department of Medicine			Site & Date of Approval	.11

## Program Goals

This program is designed to enable the student to:

1. Demonstrate basic knowledge in the most common diseases and their etiologies.
2. Ability to identify the signs, symptoms and most common forms of presentation.
3. Develop an understanding of the basic scientific principles of the investigative techniques and assess their results.
4. Be capable to develop appropriate communication skills, taking consent from the patient, approaches used to give the patient information that explain his/her condition, and how to start the management process.
5. Learn how to take full detailed history as well as performing complete general examination.

# Subjects

## 2.1Theory

Subject		Hours	General objectives
1	Introduction to clinical medicine including the communication skills, the common symptoms and the common physical signs	8	This group of lectures is designed to make the student: Understand the principles of communication skills Be able to initiate the medical interview and practice it. Be able to analyze the common symptoms and relate them to diseases. Know the definition and understand the pathophysiology of common signs in medicine
2	Nutritional disorders including: Introduction to nutritional disorders Malnutrition Vitamins and their deficiencies and excess Mineral deficiencies Obesity Lipid disorders	7	The objectives of these lectures is to make the student able to: Understand principles of nutritional disorders Know the methods of nutritional assessment and can practice these methods Differentiate between different types of nutritional disorders whether in the excess field or the deficiency field Distinguish between different vitamins and mineral disorders Understand the pathophysiology of obesity, its associated risk and its updated lines of treatment Differentiate between different kinds of lipid disorders, know their

			effect on general health of the patients and how to treat them to reduce the risks that are associated with lipid abnormalities
<b>3</b>	Clinical immunology including: Introduction Immune reactions HLA and diseases, tissue typing Immune deficiency state Immunology of cancer Immunosuppressive therapy in medicine	<b>6</b>	These lectures aim to make the student able to: Know and understand the fundamentals of clinical immunology, and the effect of immune dysfunction on the health of the patients. Differentiate between different types of immune reactions and structures with their abnormalities Understand the immunology of cancer and the principles of use of the immunosuppressive therapy and all of its associated risks
<b>4</b>	Infectious diseases including: Introduction Diseases due to viruses Diseases due to bacteria Diseases due to parasitic infestation Diseases due to fungi	<b>24</b>	This group of lectures have the following objectives that make the student able to: Know the principles of infections and the relation between the human and the pathogens in their different kinds Understand and differentiate between common clinical presentations of infectious diseases Differentiate between infectious diseases cause by different kinds of microorganisms Understand the clinical pictures, the diagnoses and the main lines of treatment and prevention of infectious diseases that

			present widely in our community
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## 2.2Clinical

No.	Topics	Hours
1	Introduction to history	8
2	Patient data, chief complaint and history of present illness	8
3	Review of systems, past history and personal /social history	8
4	Communications skills	16
5	General examination	20
Total		60

### Teaching strategy

1. Clinical training in a hospital.
2. Reliance on the main reference in terms of the PPT slides
3. Reliance on the auxiliary reference in terms of the PPT slides
4. Use the smart board form, if available.
5. Preparing students for discussion and assigning them to explain some paragraphs of the study material.

## **Textbooks**

- 1. Davidson's Principles and Practice of Medicine**
- 2. Mcleod's Physical Examination**
- 3. Harrison's Principle of Internal Medicine**



**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Scientific Department: Bio chemistry**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Prof. Dr. Falah Abbas Mohamad Salih**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyad Abid Al-Rasool Hnewa**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

## Dean's Authentication

### Description of the academic program

This description of the academic program provides a necessary summary of the most important characteristics of the program and the learning outcomes expected of the student to achieve, demonstrating whether he has made the most of the available opportunities. It is accompanied by a description of each program within the program

College of Medicine, AlWarith University	Education Department .5
biochemistry Medical	Department .6
biochemistry Medical	Name of the academic or .7 professional program
Medicine and general surgery	name of the final certificate .8
Annual	The academic system: Annual/programs/other
WFME	Accredited Accreditation .9 Program
Nil	other external influences.10
2023/1/30	date the description was .11 prepared
Objectives of the academic program.12	

Students who are able to identify different types of different solutions, measure their concentration and volumes, know the composition of the human body chemically, identify some important laboratory devices for applied uses, meet students' skills in scientific thinking and solve problems in the field of general chemistry and its applications, and are able to employ their scientific and practical capabilities as it meets the needs of the labor market.

### 13. Required program outcomes and methods of teaching, learning and assessment

Cognitive goals.

A1 - The student will be able to use and clean glassware and laboratory equipment.

A2 - The student can deal with different chemicals.

A3 - Prepare different solutions and measure their concentration and volume.

A 4 - Develop the skills of obtaining information.

b- The program's skill objectives

B 1 - Applied use of the practical material in the field of chemistry.

B 2 - Identify the various devices and chemicals used.

Methods of teaching and learning

Meeting theoretical lectures using the available display technologies (projectors and smart boards).

- Training in writing scientific seminars and how to deliver, discuss and evaluate them.

#### Evaluation methods

1- Theoretical exams (mid-year + end of the year)

2- Oral exams during the lecture.

3- Monthly exam with surprise exams .

#### C- Emotional and moral goals.

C 1 - Honesty in work and not prioritizing the material side over the ethical side of the profession

A 2 - respect for professors and classmates and work

#### Methods of teaching and learning

Giving instructions and directives regarding the behavior and goals of the medical profession

#### Methods of evaluations

- Includes oral and theoretical questions in daily and semester exams -
- Preparing seminars related to the subject of emotional values and goals - related to specialization.

D- The transferred general and qualifying skills (other skills related to employability and personal development).

D1 - Dealing with different chemicals.

D2 - acquiring laboratory management skills

### Methods of teaching and learning

- Knowledge of chemicals, their impact and risks.

Giving lectures that include general directions on laboratory management and means of communication.

### Methods of evaluations

1- Theoretical exams (mid-year + end of the year

2- Oral exams during the lecture.

3- Monthly exam with surprise exams.

### 10. Program Structure

Credit hours		name of the program or program	Program or program code	Educational level
Practical	Theory			
60	60	medicinal chemistry		Year one

### 10: Planning for personal development.

Define self-education skills and familiarize yourself with the curriculum

- Training in electronic techniques to obtain information from reliable sources.

- Enhancing group learning skills.

Enhancing leadership skills and motivating others.

10. Admission criteria (setting up regulations related to joining a college or institute)

Central admission is through an annual plan developed by the Ministry of Higher Education and Scientific Research for the medical group and is updated annually according to the results of the central examinations for middle school. Admission is usually within the medical group for high rates and according to admissions in the academic year.

The most important sources of information about the program

- The systematic book

Theoretical lectures

Trusted websites

Laboratory instructions

Curriculum skills chart	
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**Please tick the boxes corresponding to the individual learning outcomes from the program being assessed**

[illegible]

Transferred general and qualifying skills (other skills related to employability and personal development)				Emotional and value goals				Program skill goals				cognitive objectives				Basic Or optional	Name of the program	Coursr code	year/level
D4	D3	D2	D1	C4	C3	C2	C1	B4	B3	B2	B1	A4	A3	A2	A1				
	/	/	/		/	/	/	/	/	/	/	/	/	/	/	Basic	Medical chemistry		First





**Academic description of the College of Medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Scientific Department: Pathology**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Lecture Dr. Riyadh Abid Al-Rasool**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Signature**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

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**Dean's Authentication**

## Description of the academic program

This description of the academic program provides a necessary summary of the most important characteristics of the program and the learning outcomes expected of the student to achieve and demonstrating whether he has made the most of the available opportunities.

College of Medicine, AlWarith University	Education Department.14
College of Medicine / Branch of Diseases	Scientific department .15 center
General principles of pathology and specialist pathology	Department.16
Bachelor in Medicine and Surgery	Name of the academic .17 or professional program
Annual	The academic system:  Annual/programs/oth er
NCAMC	Accredited .18 Accreditation Program
Teaching Hospital, library, internet, community, doctors' syndicate	other external .19 influences
2023/1/30	date the description .20 was prepared
Curriculum objectives .21	
3. Provides students with knowledge to be able to recognize different types of pathological conditions in terms of ,etiology, pathogenesis and diagnosis.	
4. Provides students with basic knowledge in pathology to be able to recognize different pathological conditions in correlation to clinical settings in the upcoming years	

## 22.Outcomes of the curriculum and method of teaching and assessment

### C. Learning objectives

5. Teaching the basics of pathology
6. Knowing the basics pathological conditions that affect the body and different tissue
7. Knowing the etiology and pathogenesis in relation to clinical settings
8. Updating the latest diagnostic methods and their application
9. Interpretation of different laboratory test in relation to clinical presentation for proper diagnosis

### D. Skills objectives

1. Teaching skills of handling the microscope
2. Teaching the basics of tissue processing in histopathology
3. Teaching skills of different pathological test .

### Teaching method

2. Theoretical lectures
3. Practical training
4. Seminars and group discussion

### Assessment method

3. Formative assessment
4. Summative assessment

#### E. Emotional and social skills

4. Collaboration and team work
5. Time management and working in challenging situation
6. Building self confidence

#### 23. Curriculum in detail

Theory: 120 hours / year

Practical: 90 hours / year

Credits: 11 unit

<b>Theory</b>		
1 <sup>st</sup> semester	<b>Name of the session</b>	<b>Required learning outcome</b>
Week 1	Cell and tissue injury	<b>1.Types, Causes &amp;: Mechanisms of cell injury.</b> <b>2. definition, morphology &amp; types of Necrosis.</b> <b>3.morphology, mechanisms of Apoptosis.</b> <b>4. To compare between Necrosis &amp; Apoptosis.</b> 5. definition, causes, morphology of Fatty changes, protein, and glycogen accumulation. 6. definition, types of pathological calcification 7. types of calcification. To recognize, different types of pigmentations.
Week2	Cell injury & inflammation	1. definition, types, morphology of Amyloidosis 2. the adaptation. types of adaptation & the causes, mechanisms & morphology of each type. <b>4. Definition of inflammation, types of inflammation</b> <b>5. Cardinal signs of inflammation</b>
Week 3	Inflammation	<b>6. Acute inflammation</b> <b>7. Chronic inflammation types, causes, &amp; morphology of Chronic inflammation.</b> 8. To define repair and compare between regeneration & fibrosis.
Week 3	Inflammation & General pathology of infectious disease	1. Healing by first intention & secondary intention. Factors affect wound healing. 2. Definition of infection Types of infectious and mode of transmission 3. Pattern of inflammatory response 4. types, risk groups, morphology & fate of granulomatous diseases

		5. types, morphology, and fate of bacterial, fungal, viral & parasitic diseases
Week 5	Disturbance of circulation.	<ol style="list-style-type: none"> <li>1. Edema, pathophysiology &amp; morphology of edema.</li> <li>2. Congestion &amp; hyperemia.</li> <li>3. Hemorrhage. types of hemorrhage, effects of hemorrhage.</li> <li>4. thrombosis. pathogenesis of thrombosis, morphology &amp; fate of thrombosis.</li> <li>5. Embolism. types &amp; effects of embolism.</li> <li>6. Causes, effects &amp; pathogenesis of Pulmonary embolism, fat embolism &amp; amniotic fluid embolism.</li> <li>7. Ischemia, infarction. types, morphology of infarction.</li> </ol>
Week 6	Disturbance of circulation& Disorder of immune system	<ol style="list-style-type: none"> <li>1. Definition, causes, pathogenesis of DIC.</li> <li>2. Definition of shock. types of shock. pathogenesis &amp; stages of shock</li> <li>3. Types of immune response. components of each type.</li> <li>4. HLA SYSTEM. classes, importance of HLA SYSTEM.</li> <li>5. Hypersensitivity reactions. Types of hypersensitivity reactions.</li> <li>6. Types of rejection reactions in transplantation</li> <li>7. Autoimmunity. mechanisms of autoimmunity. And immunodeficiency diseases.</li> </ol>
Week 7	Disturbance of growth & neoplasia	<ol style="list-style-type: none"> <li>1. <b>tumor, tumor like lesions &amp; oncology.</b></li> <li>2. <b>Naming of tumors.</b></li> <li>3. <b>The characteristics of benign &amp; malignant. Comparison between benign &amp; malignant tumors.</b></li> <li>4. <b>Characteristics of Anaplasia &amp; Dysplasia. incidence &amp; etiology of cancer.</b></li> <li>5. <b>Carcinogenesis. the commonest chemicals, viral carcinogens &amp; their pathogenesis.</b></li> </ol>
Week 8	Disturbance of growth & neoplasia-- - Cytogenetics	<ol style="list-style-type: none"> <li>6. tumor antigens and types of tumor antigens.</li> <li>7. The effects of tumors on the host. understand: staging &amp; grading of cancer.</li> <li>8. genetic terms. types of genetic diseases. causes of genetic diseases.</li> <li>9. Karyotype. steps of Karyotype. Genetic counseling (types &amp; indications)</li> </ol>
Week 9	Cytopathology& Hemopoeitic system disorders	<ol style="list-style-type: none"> <li>1. Types of cytopathology. Stains &amp; fixatives in cytopathology. Benign &amp; malignant patterns in cytopathology</li> <li>2. Hemopoiesis. To recognize: normal values of blood components.</li> </ol>
Week 10	Hemopoeitic system disorders	<ol style="list-style-type: none"> <li>1. Definition of anemia. classification of anemia. And pathogenesis of each type. causes, morphology, &amp; Lab diagnosis of each type.</li> <li>2. Hemostasis. To recognize: types, morphology, causes of bleeding disorders.</li> </ol>

Week 11	Hemopoietic system disorders & Lymphoreticular system disorders	1. WBC production. To define: Leukemia, & define each type. To classify: leukemias. To know: causes, pathogenesis & Lab diagnosis of each type of leukemia
Week 12	Lymphoreticular system disorders	lymphoma classify: lymphoma morphology of each type of lymphoma
Week 13	Vascular diseases	1. Histology of vascular system. To know: congenital anomalies of vascular system. Arteriosclerosis & its types. 2. atherosclerosis. Risk factors, pathogenesis, morphology & complications of atherosclerosis 3. hypertension. To determine. Types of hypertension & their causes. the pathogenesis of hypertension. aneurysms & dissection. Types, morphology & complications of aneurysms & dissection 4. Vasculitis. To understand & commonest vasculitis. types & causes, morphology of vascular tumors
Week 14	Heart diseases	1. anatomy & histology of heart. Ischemic heart diseases (IHD). pathogenesis of IHD. 2. angina pectoris. types, & pathogenesis of angina pectoris. 3. myocardial infarction (MI). To know: risk factors, pathogenesis, morphology & complications of MI. 4. causes of sudden death. heart failure & its types. pathogenesis & morphology of heart failure types & causes of each type.
Week 15		Revision
<b>Midyear exam</b>		
2 <sup>nd</sup> semester		
Week 16	Heart diseases	3. To define: heart failure & its types. To understand: pathogenesis & morphology of heart failure. To recognize: types & causes of each type. To define & To know: valvular heart diseases. To define: Rheumatic fever. To understand: Pathogenesis & morphology of rheumatic fever. 4. To define: infective endocarditis. To know: types, causes, pathogenesis, & morphology of infective endocarditis. To define: Myocarditis. To know: etiology & morphology of commonest types of myocarditis..
Week 17	Respiratory system diseases	2. To know: commonest pathological lesions of upper respiratory tract. To know: the commonest congenital disorders of respiratory tract. To define: Atelectasis. 3. . To define bacterial pneumonia. To classify: pneumonias to understand: etiology, pathogenesis & morphology of pneumonia.

		<p>To know the complications of pneumonias. To define: lung abscess.</p> <p>4. To enumerate: chronic obstructive lung diseases. To define: asthma and recognize: types of asthma. To know: etiology, pathogenesis &amp; morphology of each type of asthma.</p>
Week 18	Respiratory system diseases	<p>1. To define: Emphysema To know: types, pathogenesis, morphology &amp; complications of emphysema. To define: Chronic bronchitis. To define: Bronchiectasis. To know: etiology, pathogenesis, morphology &amp; complications of Bronchiectasis.</p> <p>2. To define: restrictive lung diseases. To know: definition, causes, &amp; morphology of acute respiratory distress diseases. To know</p> <p>3. . To define: Pneumoconiosis. To know: types, morphology &amp; complications of each type.</p> <p>4. To recognize: types of lung tumors. To know: etiology, morphology &amp; complications of bronchogenic</p>
Week19	G.I.T. diseases	<p>2. To know: commonest pathological lesions of oral cavity &amp; salivary glands. To remember histology of esophagus. To know: commonest congenital anomalies of esophagus. To define: webs of esophagus.</p> <p>3. To know: types of esophageal webs. To define: achalasia. To know: types, causes, pathogenesis &amp; complications of achalasia. To Define: esophageal diverticuli.</p> <p>4. To know: types, complications of diverticuli. To know: definition, types, and complications of hiatus hernia. To know: Mallory – Weiss syndrome. To know: definition, types, causes &amp; complications of esophagitis. To understand: definition, pathogenesis &amp; complications of Barrett esophagus.</p> <p>5. To know: types, etiology, and morphology of esophageal cancers. To remember: histology of stomach. To know: the commonest congenital anomalies of stomach.</p> <p>6. To know: types of Gastritis. To know: definition, etiology, pathogenesis, &amp; morphology of acute gastritis. To define: chronic gastritis. To know: etiology, pathogenesis &amp; morphology of chronic gastritis.</p>
Week 20	G.I.T. diseases	<p>3. <b>To define: chronic peptic ulcer.</b> To know: etiology, pathogenesis &amp; morphology of chronic gastric ulcer. To know: morphology &amp; complications of chronic peptic ulcer,</p> <p>4. <b>To classify: tumors of stomach.</b> To define &amp; to know: gastric polyps, &amp; it's types. To know: types, etiology, pathogenesis &amp; morphology of gastric malignant tumors.</p> <p>5. <b>To know: etiology, pathogenesis, &amp; morphology of each type of malabsorption syndrome.</b> To define: diverticular disease of colon. To know: etiology, pathogenesis, morphology &amp; complications of diverticular disease. To define: inflammatory bowel diseases. To define: Crhon disease. To know: etiology, pathogenesis, morphology &amp; complications of Crhon disease. To define Ulcerative colitis. To know: causes, pathogenesis, morphology &amp; complications of Ulcerative colitis.</p>

		6. <b>To know: tumors of intestine.</b> To know: definition, etiology, pathogenesis & morphology of polyps. To know: types, etiology, pathogenesis, & morphology of colonic cancers.
Week 21	Liver, G.B.& pancreas diseases	<p>3. To classify: hepatitis. To define: Acute hepatitis &amp; chronic hepatitis. To know: causes of infectious hepatitis. To know: pathogenesis &amp; morphology for each type of viral hepatitis</p> <p>4. To define: liver cirrhosis: To classify: liver cirrhosis. To know: pathogenesis &amp; morphology of cirrhosis. To define: hepatic failure. To know: causes &amp; morphology of hepatic failure. To define: jaundice. To know: types, pathogenesis &amp; morphology of jaundice.</p> <p>5. To define: portal hypertension. To know: causes, morphology of portal hypertension. To know: tumors of liver. To know: causes, morphology of Liver adenoma. To know: etiology, pathogenesis &amp; morphology of hepatocellular carcinoma.</p> <p>6. To remember: histology of gallbladder. To know: types, pathogenesis, morphology &amp; complications of gall bladder and cholecystitis. To know etiology &amp; morphology of gallbladder carcinoma.</p>
Week 22	Renal diseases	<p>3. To know: types of Glomerular syndromes. To define: nephrotic &amp; nephritic syndromes. To know characteristics of Nephrotic syndrome. To know: etiology, pathogenesis, &amp; morphology of each type of Nephrotic syndromes. To know characteristics of Nephritic syndrome.</p> <p>4. To know: etiology, pathogenesis &amp; morphology of each type of nephritic syndrome. To define: chronic glomerulonephritis. To know: definition, etiology, pathogenesis, morphology &amp; complications of Acute &amp; Chronic pyelonephritis.</p>
Week 23	Renal diseases	<p>3. To define: Acute renal failure. To know: types of cystic renal diseases. To understand: etiology, pathogenesis, &amp; morphology of each type of cystic diseases. To define: Urolithiasis. To identify: types of renal stones. To know: pathogenesis, morphology of each type of renal stones</p> <p>4. To identify: types, etiology, pathogenesis &amp; morphology of renal cell carcinoma. To define: Wilm's tumor. To know: types, etiology, pathogenesis &amp; morphology of Wilm's tumor. To identify: Congenital anomalies of kidney</p>
Week 24	Breast & female genital tract	<p>3. To know: types, etiology, pathogenesis &amp; morphology of cervical carcinoma.</p> <p>4. To know: etiology, pathogenesis &amp; morphology of Adenomyosis &amp; endometrial hyperplasia. To know: types, etiology, pathogenesis &amp; morphology of endometrial hyperplasia.</p> <p>5. To identify: tumors of uterus. To define: leiomyoma. To know: To know: types, etiology, pathogenesis &amp; morphology of endometrial carcinoma.</p> <p>6. To define: oophoritis. To know: types, pathogenesis, &amp; morphology of ovarian cysts. To classify: tumors of ovary. To know: etiology, pathogenesis &amp; morphology of ovarian tumors.</p> <p>7. To define: mastitis. To know: etiology, pathogenesis, &amp; morphology of mastitis &amp; breast abscess. To define:</p>



		fibroadenoma, fibrocystic disease of breast. To classify: breast carcinoma. To understand: pathogenesis, morphology, & etiology of breast carcinoma.
Week 25	Endocrine disease	<ol style="list-style-type: none"> <li>To define: acromegaly, prolactinoma &amp; hypopituitarism. To define: hyperthyroidism &amp; hypothyroidism. To identify: etiology, pathogenesis &amp; morphology of hyperthyroidism &amp; hypothyroidism</li> <li>To define: Cushing syndrome, conns syndrome, &amp; Pheochromacytoma</li> <li>To define: multiple endocrine neoplasia. To know: the commonest syndromes of multiple endocrine neoplasia</li> </ol>
Week 26	CNS diseases	<ol style="list-style-type: none"> <li>To know: commonest congenital anomalies of CNS. To define: cerebral ischemia. To know: types, pathogenesis, and morphology of Cerebrovascular diseases</li> <li>To know; classification, morphology, &amp; etiology of CNS tumors</li> </ol>
Week 27	Bone pathology Skin pathology&	<ol style="list-style-type: none"> <li>To define: Osteomyelitis. To know: etiology, pathogenesis, &amp; morphology of Osteomyelitis. To define: metabolic bone diseases. To know: etiology &amp; morphology of metabolic bone diseases. To know: commonest benign &amp; malignant bone tumors</li> <li>To know: commonest bulbous diseases. To know: etiology, pathogenesis &amp; morphology of Psoriasis, lichen planus. To know: commonest benign tumors of skin.</li> <li>To know: etiology, pathogenesis &amp; morphology of squamous cell carcinoma, malignant melanoma &amp; basal cell carcinoma of skin</li> </ol>
Week 28	Male reproductive system diseases	<ol style="list-style-type: none"> <li>To identify: types, pathogenesis &amp; morphology of prostatitis. To define: Benign prostatic hyperplasia (BPH).</li> <li>To know: etiology, pathogenesis &amp; morphology of Seminoma, Teratomas of testis.</li> </ol>
Week29	New advances in Pathology	To understand: principles of immunohistochemistry, electron microscope, Fluorescent in situ hybridization, & PCR
Week 30	Revision	

## Practical

<b>First semester</b>	
Week1	Tissue processing
Week 2	Cell injury
Week 3	Acute inflammation
Week 4	Chronic inflammation and repair
Week 5	Hemodynamic
Week 6	Hemodynamic
Week 7	Benign Neoplasia
Week 8	Malignant Neoplasia
Week 9	Hematology
Week 10	Hematology
Week 11	Vascular Disease
Week 12	Heart Disease

Week 13	genetic disorder
Week 14	Infectious disorder
Week 15	Revision
<b>2<sup>nd</sup> semester</b>	
Week 16	Vascular diseases
Week 17	Diseases of heart
Week 18	Diseases of respiratory system
Week 19	Diseases of GIT
Week 20	Diseases of GIT
Week 21	Diseases of liver, GB, pancreas
Week 22	Diseases of female genital syst.
Week 23	Disease of the breast
Week 24	Disease of renal system
Week 25	Diseases of male genital syst.
Week 26	Diseases of endocrine path.
Week 27	Disease of CNS
Week 28	Disease of bone and joint
Week 28	Disease of skin
Week 30	Revision

#### 24.Planning for personal development

Continuous follow-up of periodicals and scientific journals, and updating lectures

Introducing new methods in education

Admission criteria (setting up regulations related to joining a college or institute) .25

The most important sources of information about the program .26

Prescribed books

Robbins and Cotran Pathologic basis of disease ,10<sup>th</sup> edition -, KUMAR,ABBAS  
I&ASTER

Additional sources

Ackerman surgical pathology, 10th edition, 2011, Juan Rosai. • Sternderg's  
diagnostic surgical pathology, 5th edition, 2010

Hoff brand Essential hematology-7<sup>th</sup> edition ,

Electronic sources

<http://www.pathologyonlinecases.com>

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Scientific Department: pharmacy**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Lec. Dr. Alaa Gazi Hamid**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Dean's Authentication**

This program description provides a summary of the most important characteristics of the program and the learning objectives that the student is expected to achieve, demonstrating whether he has made maximum use of the available learning opportunities. It must be linked to the description of the program.

1- educational institution
University of Warith Al-Anbiyaa <b>college of medicine</b>
2-Scientific Department / Center
<b>Pharmacology</b>
3-Academic or professional program name
<b>Human medicine</b>
4-Final certificate name
<b>Bachelor of Medicine and General Surgery</b>
5-Academic system (annual / programs / semesters)
annual
6- Semester/year
year
7-Available forms of attendance
<b>Actual mandatory attendance</b>
<b>Symbol</b>
<b>PHA3</b>
8-The number of study hours
<b>Theoretical... 90 hours</b> <b>Practical....60 hours</b>
9-Accredited Accreditation Program
<b>NCAMC</b>
10-Other external influences
<b>A teaching hospital, library, internet, community, doctors' syndicate</b>
11-Description creation date
<b>30/1/2023</b>
12-Academic Program Objectives

- Defining how to use different groups of medicines and good drugs to treat different diseases.
- 2 -Describe the mechanism of work of the various body systems and the accompanying sequence of physiological and pathological events.
- 3 -Defining the mechanism of selecting the appropriate drugs in the event of more than one disease occurring at the same time
- 4 -Definition of the side effects associated with taking medicines and how to deal with them and reduce their occurrence
- 5 -Estimation of the normal values of vital activities in relation to different biological conditions.
- 6 -Expanding knowledge through periodicals, medical books and the Internet.
- 7 -Apply the basic scientific building blocks acquired by him to conduct scientific research and medical studies.
- 8- Determining the functions of the various body systems

### **13-Required program outcomes and methods of teaching, learning, and assessment**

#### **➤ Cognitive goals**

- Learning the basics of drug action and its various groups.
- 2 -Learning to use appropriate doses and methods of administering medicine to medicines to treat various disease conditions
- 3 -Developing mental abilities through various modern academic and practical methods of education
- 4 -Linking basic sciences with applied sciences in the future
- 5 -Learn about the methods of action and effect of drugs
- 6 -Learn the method of scientific discussion
- 7- Acquisition of laboratory skills

### **14- Skills objectives of the program**

- 1 - Methods of dealing with laboratory animals and scientific equipment
- 2 -How to use and give medicines to the patient
- 3- Acquisition of human clinical examination skills

#### **• Teaching and learning methods**

- 1 - Lectures - computers - plasma screens - modern scientific equipment - clinical tours - educational seminars, audio-visual equipment - discussions.
- 2- In-person and electronic blended education (via the Classroom platform).

#### **• Evaluation Methods**

- 1-Discussion in lectures
- 2 -Mid-program exams and end-of-program exams
- 3 -Periodic evaluation

4 -Small education groups

5- Practical exams.

➤ **Transferred general and qualification skills**

1-The student should cooperate with his colleagues and teachers in an atmosphere of cordiality and understanding

2 -To work with his peers as a team

3- To interact with them on scientific trips and the media.

**15- The structure of the program for pharmacology/ thidr level**

<b>Week</b>	<b>Hours</b>	<b>Required educational goals</b>	<b>Unit name and/or topic</b>	<b>education method</b>	<b>evaluation method</b>
1,2	6	Pharmacokinetics and Pharmacodynamics	Pharmacology	Lecture	Exam
3,4	6	Autonomic nervous System	Pharmacology	Lecture	Exam
5	3	Autacoids	Pharmacology	Lecture	Exam
6,7,8,9	12	Drugs for Central Nervous System	Pharmacology	Lecture	Exam
10,11,12	9	Drugs for Cardiovascular System	Pharmacology	Lecture	Exam
13,14	6	Drugs for Blood	Pharmacology	Lecture	Exam
15	3	NSAIDs and Gout	Pharmacology	Lecture	Exam
16	3	Drugs for Respiratory System	Pharmacology	Lecture	Exam
17,18,19,20,21	15	Antimicrobial Drugs	Pharmacology	Lecture	Exam
22	3	Anticancer Drugs	Pharmacology	Lecture	Exam
23-26	12	Drugs for Endocrine System	Pharmacology	Lecture	Exam
27,28	6	Drugs for Gastrointestinal Drugs	Pharmacology	Lecture	Exam

29,30	6	Miscellaneous Drugs andsubjects	Pharmacology	Lecture	Exam
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<b>17- The structure of the program for practical pharmacology/ third level</b>					
<b>Week</b>	<b>Hours</b>	<b>Required educational goals</b>	<b>Unit name and/or topic</b>	<b>education method</b>	<b>evaluation method</b>
1	3	Introduction to Pharmacology	Pharmacology	Lecture + laboratory experiment	Exam
2	3	Pharmacokinetics	Pharmacology	Lecture + laboratory experiment	Exam
3	3	Pharmacodynamics	Pharmacology	Lecture + laboratory experiment	Exam
4	3	Dosage forms	Pharmacology	Lecture + laboratory experiment	Exam
5	3	Routes of administration	Pharmacology	Lecture + laboratory experiment	Exam
6	3	Beta-Blockers	Pharmacology	Lecture + laboratory experiment	Exam
7	3	Nitric oxide	Pharmacology	Lecture + laboratory experiment	Exam
8	3	Eye drops	Pharmacology	Lecture + laboratory experiment	Exam
9	3	Physostigmine	Pharmacology	Lecture + laboratory experiment	Exam
10	3	Exercise and heart	Pharmacology	Lecture +	Exam

		rate		laboratory experiment	
11	3	Drug Interactions	Pharmacology	Lecture + laboratory experiment	Exam
12	3	Drugs in Pregnancy	Pharmacology	Lecture + laboratory experiment	Exam
13	3	Drugs in Lactation	Pharmacology	Lecture + laboratory experiment	Exam
14	3	Adverse Drug Reactions	Pharmacology	Lecture + laboratory experiment	Exam
15	3	Drug Calculations	Pharmacology	Lecture + laboratory experiment	Exam
1	3	Measuring blood pressure and heart rate	Pharmacology	Lecture + laboratory experiment	Exam
2	3	Effect of Atropine on the eye	Pharmacology	Lecture + laboratory experiment	Exam
3	3	Toxicity of Physostigmine	Pharmacology	Lecture + laboratory experiment	Exam
4	3	The effect of adrenaline on the heart	Pharmacology	Lecture + laboratory experiment	Exam
5	3	Drug dissolution and deposition	Pharmacology	Lecture + laboratory experiment	Exam
6	3	Animal handling	Pharmacology	Lecture + laboratory experiment	Exam
7	3	Injections	Pharmacology	Lecture + laboratory experiment	Exam
8	3	Respirometer	Pharmacology	Lecture + laboratory experiment	Exam

9	3	Toxicity of the drugs	Pharmacology	Lecture + laboratory experiment	Exam
10	3	Clinical trials	Pharmacology	Lecture + laboratory experiment	Exam
11	3	Drug in renal failure	Pharmacology	Lecture + laboratory experiment	Exam
12	3	Drug in liver failure	Pharmacology	Lecture + laboratory experiment	Exam
13	3	Experimental Pharmacology	Pharmacology	Lecture + laboratory experiment	Exam
14	3	Drug Abuse	Pharmacology	Lecture + laboratory experiment	Exam
15	3	Discussion of Seminars	Pharmacology	Lecture + laboratory experiment	Exam

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Scientific Department: physiology and medical physics**

**File filling date: 2022/2023**

**Signature**

**Department head**

**lectural Ali Hameed Shalaan**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool Hniwa**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Dean's Authentication**

- **Credits:** 14 credit unit.
- **Programs:** 2 program in one academic year.
- **Hours:** a total of 180 hour divided as follows
  - 150 hours for the theoretical lectures (75 hours/ semester, 5 hours/week). Each 15 hours equal 1 credit unit (15 hours = 10 units).
  - 120 hours for the practical sessions (60 hours/ semester, 4 hours/week). Each 30 hours equal 1 credit unit (120 hours = 4 units).
- **Reprograms:**
  - Guyton and Hall textbook of medical physiology 14<sup>th</sup> edition.
  - Ganong's review of physiology 26<sup>th</sup> edition.
- **Objectives:**
  - Students should know basics of physiology like cellular function and multisystem interaction.
  - Students should learn about the pathophysiology of different diseases affecting the human body and should understand the mechanism of clinical presentations.
  - The student should also develop a competent usage of every day practice medical tools and instruments like thermometers, sphygmomanometer, ophthalmoscope, ECG, spirometers. ....etc.
  - Learn how to apply experimentally factual information presented in lectures and textbook.
  - Gain experience in use of scientific method to design experiments, acquire data, and interpret that data meaningfully.
  - Acquire knowledge in working with live animals and tissue preparations that simulate human anatomy and physiology.
  - Perform several clinical tests, involving both fresh and preserved blood samples which will describe some important physiologic aspects of this fluid.
  - Prepare the students to solve any problem that they might face during their future practical profession.
- **Instructional and learning methods and tools:** The syllabus is given to the students through lectures, with quizzes (arranged and not arranged). The lectures are given as a power point slides and teaching videos with some illustration on white board. Regarding laboratory experiments, the student are divided into 20 groups, 4-5 students per each, who work on as team for each experiments and they are responsible for doing the experiment, discussing their own results with the teaching staff.
- **Student Assessment:** The minimum requirement of a student to pass is to achieve at least 50% of the total marks assigned for the program. The marks are distributed as follows:
  1. Mid-term exam 20 marks conducted as best answer MCQ.
  2. Practical sections assessment 10 marks.
  3. Quizzes 10 marks: as short essay questions.
  4. End-term final exam 60 marks: as follows
    - A. Practical 20 marks in the form of OSPE in slide show presentation.
    - B. Theory 40 marks including single choice questions 60%, and short essay 40%.

Students who fail to attain the 50% cut-off mark are required to re-sit for a second trial examination similar to the final one. Failing in the second trial entails the student to repeat the academic year.

<i>1<sup>st</sup> semester theoretical lectures</i>		
<i>Major topic</i>	<i>Subtopics</i>	<i>Hours</i>
<b><i>Cell physiology and body fluids</i></b>	<ul style="list-style-type: none"> <li>- Describe the structure and functions of the plasma membrane, glycocalyx, and ions channels.</li> <li>- Expound the functions of cilia and flagella.</li> <li>- Explain the means of cell-to-cell adhesion.</li> <li>- Describe how the cells communicate with each other (signal transduction or cell signaling).</li> <li>- Expound the ways by which cell regulates the intracellular [Ca<sup>2+</sup>] and [H<sup>+</sup>].</li> <li>- Know the composition of extracellular and intracellular body fluids.</li> <li>- Explain osmosis, osmolarity and osmotic pressure, and tonicity of the body fluids.</li> <li>- Know the forces producing movement of substances between compartments.</li> <li>- Describe the process of endocytosis and exocytosis.</li> <li>- Describe the primary factors (Starling forces) that determine fluid movement through the capillary membrane and the formation of interstitial fluid and lymph.</li> <li>- Describe the intake versus output of water.</li> </ul>	10
<b><i>Blood physiology</i></b>	<ul style="list-style-type: none"> <li>- Describe the blood components and hemopoiesis.</li> <li>- Describe red blood cell, its function, and explain the mechanism for regulation of its production.</li> <li>- Expound the plasma proteins and their functions.</li> <li>- Understand the composition, types, forms, synthesis, destruction and abnormalities of Hb.</li> <li>- Characterize the types of anemia.</li> <li>- Explain the types, functions, and the formation of white blood cells.</li> <li>- Describe the types of immunity and the development of the immune system.</li> <li>- Understand the inflammatory process.</li> <li>- Expound blood types, blood incompatibility, and transfusion reaction.</li> <li>- Understand platelets and their functions.</li> <li>- Describe hemostasis &amp; fibrinolytic activity.</li> </ul>	10
<b><i>Nerve and muscle physiology</i></b>	<ul style="list-style-type: none"> <li>- Explain the genesis of resting membrane potential.</li> <li>- Describe the action potential of nerve, skeletal, cardiac, and smooth muscle fibers.</li> <li>- Expound the effect of extracellular fluid ion concentrations on the cell membrane potential.</li> <li>- Explain the mechanism of propagation of the action potential.</li> <li>- Describe rhythmicity of certain excitable tissues.</li> </ul>	10

	<ul style="list-style-type: none"> <li>- Expound the nerve fiber morphology, its myelination, and the nerve fiber classification.</li> <li>- Explain the synaptic transmission and neurotransmitters.</li> <li>- Expound transmission of impulses from nerves to skeletal muscle fibers: The neuromuscular junction.</li> <li>- Describe the histological appearance of the skeletal muscle fiber.</li> <li>- Explain the mechanism of muscle contraction.</li> <li>- Describe the source of energy for the muscle.</li> <li>- Characterize types of muscle contraction.</li> <li>- Expound different events-related to muscle contraction such as skeletal muscle tone, muscle fatigue, muscle hypertrophy, muscle atrophy, the staircase effect, and Relationship between muscle length and tension.</li> <li>- Describe the types of smooth muscles, and the mechanism of smooth muscle contraction.</li> <li>- Explain the difference between smooth, skeletal, and cardiac muscles.</li> </ul>	
<b><i>Digestive system</i></b>	<ul style="list-style-type: none"> <li>- Describe the gross and microscopic anatomy and the basic functions of the digestive system.</li> <li>- Describe the composition and functions of saliva, and explain how salivation is regulated.</li> <li>- Describe the mechanisms of chewing and swallowing.</li> <li>- Explain how gastric secretion and stomach motility are regulated.</li> <li>- Explain the mechanism of vomiting.</li> <li>- Describe the role of the gallbladder and state the role of bile in digestion and describe how its entry into the small intestine is regulated.</li> <li>- Describe how entry of pancreatic juice into the small intestine is regulated and state the role of pancreatic juice in digestion.</li> <li>- List the major functions of the large and small intestine.</li> <li>- Describe the regulation of defecation.</li> <li>- List the enzymes involved in chemical digestion; name the foodstuffs on which they act.</li> <li>- List the end products of protein, fat, carbohydrate, and nucleic acid digestion.</li> <li>- Describe the process of absorption of breakdown products of foodstuffs that occurs in the small intestine.</li> <li>- Describe the main functions of liver.</li> </ul>	15
<b><i>Respiratory physiology</i></b>	<ul style="list-style-type: none"> <li>- Explain the anatomical and physiological classification of the respiratory system.</li> <li>- Describe the functions of pleura.</li> <li>- Expound the processes of inspiration and expiration.</li> <li>- Define the general classification of lung disorders.</li> <li>- Identify the role of surfactant in respiratory physiology.</li> </ul>	15

	<ul style="list-style-type: none"> <li>- Explain the compliance of the lung and the work of breathing.</li> <li>- Describe the pulmonary volumes and capacities and their measurement.</li> <li>- Identify the dead space.</li> <li>- Expound the respiratory passageways resistance.</li> <li>- Explain nervous and humeral control over the airway smooth muscles.</li> <li>- Describe the respiratory unit, respiratory membrane, and the factors that affect rate of gas diffusion through the respiratory membrane.</li> <li>- Identify ventilation – perfusion ratio of the lungs and its regulation.</li> <li>- Describe the transport of oxygen and carbon dioxide in the blood and body fluids.</li> <li>- Expound O<sub>2</sub>-Hb dissociation curve and its importance in loading and unloading of oxygen by the blood.</li> <li>- Explain the brainstem respiratory center control over respiration.</li> <li>- Describe the factors that regulate respiration through modulation of the activity of respiratory center.</li> <li>- Expound the pulmonary blood flow.</li> <li>- Define hypoxia and its types.</li> <li>- Define hypercapnia.</li> <li>- Describe specific ventilatory patterns.</li> </ul>	
<b><i>CVS physiology</i></b>	<ul style="list-style-type: none"> <li>- Explore anatomical and physiological considerations of cardiovascular system, comparison the structures and pathways of the pulmonary and systemic circulations, comparison in the structure of an artery and vein, and explain how the structure of each type of vessel relates to its function. Describe the structure of capillaries and explain the physiological significance of this structure.</li> <li>- Explain the operation of the heart valves. Explain the origin of the heart sounds and state when in the cardiac cycle these sounds are produced.</li> <li>- Name the functional blood supply of the heart. Define ischemia and discuss the possible causes of myocardial ischemia.</li> <li>- Explore the cardiac muscle cells metabolism.</li> <li>- Describe action potential of atrial and ventricular cardiac muscles, the structures and pathways of electrical impulse conduction in the heart, the electrical activity in the sinoatrial node and explain why this tissue functions as the heart's normal pacemaker.</li> <li>- Relate the time involved in the production of an action potential to the time involved in the contraction of</li> </ul>	15



	<p>myocardial cells and explain the significance of this relationship.</p> <ul style="list-style-type: none"> <li>- Describe the medullary control of the cardiovascular system</li> <li>- Explore the role of exercise, epinephrine, various ions, and autonomic nervous system in control on heart rate.</li> <li>- Explain what information can be gained from an electrocardiogram (ECG), the Leads of the ECG, meaning of the QRS-T complex of an ECG record, vectors and mean electrical axis. Describe some common arrhythmias that can be detected with an ECG.</li> <li>- Describe the cardiac cycle, describe the pressure changes that occur in the ventricles during the cardiac cycle and relate these changes to the action of the valves and the flow of blood. Define systole, diastole, and stroke volume.</li> <li>- Explain Cardiac Output and Its control.</li> <li>- Define heart sounds, and murmur.</li> <li>- Explain Blood Flow, Blood Pressure, and Resistance and factors affect them</li> <li>- Define blood pressure, and list factors affecting and/or determining blood pressure.</li> <li>- Define and explain Circulatory shock.</li> <li>- Define autoregulation and local regulation of blood flow (perfusion).</li> <li>- Discuss the unique features of the arterial circulation of the brain, fetus, skin, skeletal muscles, lungs, heart, and hepatic portal circulation.</li> <li>- Name the fetal vascular modifications, or “fetal shunts,” and describe their function before birth.</li> <li>- Describe the circulatory changes that occur during exercise, during change in body position, cardiovascular changes during pregnancy.</li> </ul>	
	<b><i>Total credits</i></b>	<b>75</b>

<i>Practical themes of the 1<sup>st</sup> semester</i>		
<i>wk</i>	<i>Experiment</i>	<i>Dedicated hours</i>
1	RBC count	4
2	WBC count	4
3	Blood Film (WBC differential count)	4
4	Packed cell volume	4
5	Tests for bleeding disorders	4
6	ESR	4
7	Blood indices	4
8	Blood bank	4
9	Blood groups	4
10	Arterial blood pressure	4
11	Body temperature	4
12	Heart sounds	4
13	EMG	4
14		
15	Revision	4
<i>Total hours</i>		<b>60</b>

<i>2<sup>nd</sup> semester theoretical lectures</i>		
<i>Major topic</i>	<i>Subtopics</i>	<i>Hours</i>
<b><i>Autonomic nervous system</i></b>	<ul style="list-style-type: none"> <li>- Describe the anatomical organization of the parasympathetic and sympathetic nervous system.</li> <li>- List the different types of adrenergic and cholinergic receptors.</li> <li>- Tabulate the receptor-mediated biological effects of different adrenergic receptors in different organs.</li> </ul>	5
<b><i>CNS physiology</i></b>	<ul style="list-style-type: none"> <li>- Describe the basic structural and organizational characteristics of the nervous system.</li> <li>- Discuss the structure and functions of the spinal cord.</li> <li>- Discuss the significance of neuronal pools, and describe the major patterns of interaction among neurons within and among these pools and the inhibitory mechanisms within the CNS.</li> <li>- Identify the receptors for the general senses, and describe how they function.</li> <li>- Identify the major sensory pathways, and explain how it is possible to distinguish among sensations that originate in different areas of the body.</li> <li>- Describe the higher interpretation of sensory signals by the cerebral cortex in Primary sensory areas, Sensory association areas, and Wernicke's area.</li> <li>- Describe the components, processes, and functions of the somatic motor pathways, and the levels of information processing involved in motor control.</li> <li>- Describe the steps in a neural reflex, and classify the types of reflexes.</li> </ul>	15

	<ul style="list-style-type: none"> <li>- Explain how higher centers control and modify reflex responses.</li> <li>- Identify the main components of the medulla oblongata, pons, the midbrain, the diencephalon, the limbic system, thalamus, hypothalamus, basal ganglia, cerebrum, and the cerebellum, and specify the functions of each.</li> <li>- Explain postural reflexes.</li> <li>- Discuss the origin and significance of the major types of brain waves seen in an electroencephalogram.</li> <li>- Define and discuss emotion, memory, Language and Speech, and sleep.</li> <li>- Explain how the brain is protected and supported, and discuss the formation, circulation, and function of cerebrospinal fluid.</li> </ul>	
<b><i>Endocrine physiology</i></b>	<ul style="list-style-type: none"> <li>- List the functions of hormones.</li> <li>- Classify hormones into their major chemical categories.</li> <li>- Describe the synthesis, storage, hormone receptors, regulation of secretion, and mechanism of Action of Hormones</li> <li>- Describe how the hypothalamus of the brain controls the endocrine system.</li> <li>- Name the endocrine glands and state where they are located and the hormones secreted by each.</li> <li>- List the major hormones and their effects on the body.</li> <li>- Understand the role of hormone-binding proteins.</li> <li>- Understand the feedback control mechanisms of hormone secretion.</li> <li>- Explain the effects of secretion, degradation, and excretion on plasma hormone concentrations.</li> <li>- State the functions of oxytocin and explain the stimulus for secretion of each.</li> <li>- State the functions of the hormones of the anterior pituitary gland, and state the stimulus for secretion of each.</li> <li>- State the synthesis, release, transport, regulation of secretion, functions of thyroxine and T3, and describe the stimulus for their secretion.</li> <li>- Give examples of the clinical application of excess or deficit of thyroid hormones.</li> <li>- State the structure, mechanism of secretion, Mechanism of action, function, regulation of secretion of insulin</li> <li>- Pathophysiology of diabetes mellitus</li> <li>- Explain how calcitonin and parathyroid hormone work as antagonists.</li> <li>- Explain how glucagon and insulin work as antagonists.</li> <li>- Explain somatostatin action and regulation of secretion</li> <li>- Describe adrenal glands histologically, type of secretions.</li> </ul>	30

	<ul style="list-style-type: none"> <li>- State the functions of epinephrine and norepinephrine, regulation of adrenal medullary secretion, and explain their relationship to the sympathetic division of the autonomic nervous system.</li> <li>- Describe the effects of Dopamine release.</li> <li>- Describe the Calcium metabolism and bone physiology including the role of 1-25</li> <li>- Dihydroxycholecalciferol, Parathyroid hormone (PTH), and Calcitonin.</li> <li>- State the functions of aldosterone and cortisol, and describe the stimulus for secretion of each.</li> <li>- Explain Vasopressin Effects, its control of secretion, and an example of clinical application.</li> <li>- State Growth Hormone (GH) and Somatomedins effects and stimulus of their release.</li> <li>- Describe the factors that affect the Growth.</li> <li>- State the function and control of secretion of melanocyte stimulating hormone.</li> <li>- Expound the Male reproductive system and its hormones including Gametogenesis and ejaculation,</li> <li>- The Sertoli cells secretion, Spermatogenesis and the factors affect it, Semen composition, secretion, Erection &amp; Ejaculation.</li> <li>- Expound the function and control of secretion of prolactin.</li> <li>- Describe the Female reproductive system including Control of ovarian functions, Ovarian (menstrual) cycle,</li> <li>- Uterine cycle.</li> <li>- State the functions of estrogen, progesterone, testosterone, and inhibin and state the stimulus for secretion of each.</li> <li>- Explain some aspects about Contraception, Puberty, Menopause, Menstrual abnormalities, Pregnancy, and Parturition.</li> <li>- Explore the Hormones secreted from placenta and their functions.</li> <li>- Expound Development of breasts and lactation.</li> <li>- Explain how the steroid hormones are believed to exert their effects.</li> </ul>	
<b>Renal physiology</b>	<ul style="list-style-type: none"> <li>- Describe the different regions of the nephron tubules and the location of the tubules in the kidney.</li> <li>- Describe the structural and functional relationships between the nephron tubules and their associated blood vessels.</li> <li>- Describe the composition of glomerular ultrafiltrate and explain how it is produced.</li> <li>- Explain how the proximal convoluted tubule reabsorbs salt and water.</li> </ul>	10

	<ul style="list-style-type: none"> <li>- Describe active transport and osmosis in the loop of Henle and explain how these processes produce a countercurrent multiplier system.</li> <li>- Explain how the vasa recta function in countercurrent exchange.</li> <li>- Describe the role of antidiuretic hormone (ADH) in regulating the final urine volume.</li> <li>- Describe the mechanisms of glucose reabsorption and define the terms transport maximum and renal plasma threshold.</li> <li>- Define the term renal plasma clearance and explain why the clearance of inulin is equal to the glomerular filtration rate.</li> <li>- Explain how the clearance of different molecules is determined and how the processes of reabsorption and secretion affect the clearance measurement.</li> <li>- Describe the mechanism of Na<sup>+</sup> reabsorption in the distal tubule and explain why this reabsorption occurs together with the secretion of K<sup>+</sup>.</li> <li>- Describe the effects of aldosterone on the cortical portion of the collecting duct and explain how aldosterone secretion is regulated.</li> <li>- Explain how activation of the renin-angiotensin-aldosterone system results in the stimulation of aldosterone secretion.</li> <li>- Explain how the interaction between plasma K<sup>+</sup> and H<sup>+</sup> concentrations affects the tubular secretion of these ions.</li> <li>- Describe the role of the kidneys in the regulation of acid-base balance.</li> <li>- Describe the different mechanisms by which substances can act as diuretics and explain why some diuretics cause excessive loss of K<sup>+</sup>.</li> </ul>	
<b><i>Special senses physiology</i></b>	<ul style="list-style-type: none"> <li>- Identify the internal and accessory structures of the eye, and explain the functions of each.</li> <li>- Explain the principles of optics, the eye &amp; light refraction.</li> <li>- Explain eye accommodation, the near point of vision, emmetropia, and errors of refraction.</li> <li>- Describe the microscopic details of retina, visual receptors.</li> <li>- Explain color, the mechanism of dark &amp; light adaptation and color vision.</li> <li>- Describe how light stimulates the production of nerve impulses, and trace the visual pathways to their destinations in the brain.</li> <li>- Explain vision-related events (the fields of vision, pupillary light reflex and accommodation reflex).</li> <li>- Describe the structures of the external, middle, and internal ear, explain their roles in equilibrium and hearing, and trace the pathways for equilibrium and hearing to their destinations in the brain.</li> </ul>	2

	<ul style="list-style-type: none"> <li>- Describe the sensory organs of smell, trace the olfactory pathways to their destinations in the brain, and explain the physiological basis of olfactory discrimination.</li> <li>- Describe the sensory organs of taste, trace the gustatory pathways to their destinations in the brain, and explain the physiological basis of gustatory discrimination.</li> </ul>	
<b>Acid-base physiology</b>	<ul style="list-style-type: none"> <li>- Explain the influence of the hydrogen ion (<math>H^+</math>) on body fluids.</li> <li>- Identify the pH ranges for acidosis and alkalosis.</li> <li>- Discuss the three regulatory mechanisms for pH control and how the regulatory mechanisms can maintain acid-base balance.</li> <li>- Identify metabolic acidosis and alkalosis and respiratory acidosis and alkalosis through use of arterial blood gases.</li> <li>- Explain how various clinical conditions can cause metabolic acidosis and alkalosis and respiratory acidosis and alkalosis.</li> <li>- Identify clinical symptoms of metabolic acidosis and alkalosis and respiratory acidosis and alkalosis.</li> <li>- Discuss the body's defense action and the clinical management for acid-base balance and be able to apply this information to various clinical situations.</li> <li>- Explain the health interventions for patients in metabolic and respiratory acidosis and alkalosis states.</li> </ul>	2
<b>Skin, Body Temperature</b>	<ul style="list-style-type: none"> <li>- Understand how the human body regulates temperature.</li> <li>- Explore ways in which the human body self-regulates to maintain homeostasis.</li> </ul>	1
	<b>Total hours</b>	<b>75</b>

<b>Practical themes of the 2<sup>nd</sup> semester</b>		
<b>wk</b>	<b>Experiment</b>	<b>Dedicated hours</b>
1	Electrocardiography	4
2	Electrocardiography	4
3	Vital signs in exercise	4
4	Lung function tests	4
5	Examination of the sensory system	4
6	Examination of the motor system	4
7	Examination of the motor system	4
8	Examination of the autonomic system	4
9	Examination of the cranial nerves	4
10	Examination of the cranial nerves	4
11	Examination of the optic nerve	4
12	Ophthalmoscopy	4
13	Revision	4
14	Revision	4
15	Practical exam	4
	<b>Total hours</b>	<b>60</b>

**Academic description of the College of medicine**

**University of Warith Al-Anbiyaa**

**College of Medicine**

**Scientific Department: Surgery**

**File filling date: 2022/2023**

**Signature**

**Department head**

**Ass. Prof. Salim Mahdi Al- bassam**

**Signature**

**Associate Dean for Scientific Affairs**

**Lecture Dr. Riyadh Abid Al-Rasool Hnewa**

**The file has already been checked by:**

**Quality Assurance and University Performance Division**

**Director of Quality Assurance and Medical Accreditation:**

**Prof. Dr. Talib Jawad Kadhim**

**Date 2022/2023**

**Signature**

**Dean's Authentication**

Program				
General surgery			Program name	.1
50101320			Program No.	.2
Total	Practical	Theory	Credit Hours	.3
2 Units	-	1 credit h/ week 15/ Semester 30/ Year	Level and semester: third stage	.4
Not present			Prerequisite Programs	.5
Not present			Co-requisite	.6
Bachelor in Medicine and Surgery			Degree	.7
English			Teaching Language	.8
University of Warith Al-Anbiyaa			Place used for teaching	.9
Dr. Salim Al-Bassam			Name of Instructor	.10
Department of Surgery2/10/22			Site & Date of Approval	.11



## **Program Goals**

**At the end of this program,** students will be oriented to the main terms used in the program as well as providing them with information about all surgical diseases and conditions.

**This program aims to:**

- Access to basic information about general and laparoscopic surgery.
- Create basic knowledge about general and laparoscopic surgery.
- Encourage and train students how to deal with medical scientific facts.

**It also aims to:**

- Describe the signs and symptoms of the basic surgical diseases.
- Describe its diagnostic characteristics.
- Understanding its pathogenesis.
- Identify the methods of managements.

## **Program outcomes**

At the end of this program, students will be able to:

- Explain the results of the laboratory tests that will help reaching the final diagnosis.
- Teach students and give them an opportunity to learn how to write reports or scientific articles.
- Describe the symptoms and signs of diseases of general surgery
- Understanding and identification of acute and chronic surgical cases
- Determine methods of control and treatment

## Subjects

### Theory

1<sup>st</sup> Semester

1 Credit h/week

No.	Lecture	Hours/ week
1.	<b>Introduction to surgery, types of abdominal incisions and suture materials.</b>	1
2.	<b>Wound healing, types and complications</b>	1
3.	<b>Wound healing, types and complications</b>	1
4.	<b>Wound healing, types and complications</b>	1
5.	<b>Surgical infection</b>	1
6.	<b>Surgical infection</b>	1
7.	<b>Surgical infection</b>	1
8.	<b>Preoperative preparation of patients for operation</b>	1
9.	<b>Blood transfusion</b>	1
10.	<b>Fluids, electrolytes and acid base balance</b>	1
11.	<b>Fluids, electrolytes and acid base balance</b>	1
12.	<b>Trauma, hemorrhage, critical care and acute life support</b>	1
13.	<b>Trauma, hemorrhage, critical care and acute life support</b>	1
14.	<b>Metabolic response to trauma</b>	1
15.	<b>Sterilization, disinfection and hospital acquired infection</b>	1
Total/ 15 Hours		

2<sup>nd</sup> Semester

1 Credit hour/ week

No.	Lecture	Hours/week
1.	<b>Shock</b>	1
2.	<b>Shock</b>	1
3.	<b>Shock</b>	1
4.	<b>Burns, skin grafts</b>	1
5.	<b>Burns, skin grafts</b>	1
6.	<b>Burns, skin grafts</b>	1
7.	<b>Principles of oncology</b>	1
8.	<b>Principles of oncology</b>	1
9.	<b>Principles of transplantation</b>	1
10.	<b>Hydatid diseases</b>	1
11.	<b>Cysts, ulcers, fistulas, and sinuses</b>	1
12.	<b>Principles of laparoscopic surgery</b>	1
13.	<b>Vascular diseases</b>	1
14.	<b>Vascular diseases</b>	1
15.	<b>Vascular diseases</b>	1
Total		15 hours

Practical hours

Teaching strategy

1. Clinical training in a hospital.
2. Reliance on the main reference in terms of the 2PPT slides
3. Reliance on the auxiliary reference in terms of the 3PPT slides
4. Using the smart board model.

5. A form for preparing students for discussion and assigning them to explain some paragraphs of the study material.

Learning sources

.1Bailey & Love: short practice of surgery

.2lecture notes

.3Internet

.4Scientific sessions

<b>Program Description</b>				
General surgery			Program name	.1
50101320			Program No.	.2
Total	Practical	Theory	Credit Hours	.3
5 Units	2 h/w	3h/w	Level and semester: third stage	.4
Not present			Prerequisite Programs	.5
Not present			Co-requisite	.6
Bachelor in Medicine and Surgery			Degree	.7
English			Teaching Language	.8
University of Warith Al-Anbiyaa			Place used for teaching	.9
Dr. Salim Al-Bassam			Name of Instructor	.10
Department of Surgery2/10/22			Site & Date of Approval	.11

## Program Outline

Week	Sunday class	Tuesday class
1	Surgical ward environment, conditions of clinical exam	Introduction and counseling of the patient
2	General examination, vital signs	General assessment of patient
3	General symptoms and signs of surgical diseases	Common symptoms of surgical diseases

4	Breast examination	Identify most common breast diseases
5	Thyroid examination	Identify most common thyroid diseases
6	Abdominal examination, hernia	Feedback and discussions of first exam results
7	IV fluid, cannula	Management of special cases regarding shock
8		Final Exams

**Textbook:** Bailey & Love Short Practice of Surgery. 27<sup>th</sup> edition.

**Suggested references:** Browse's 5<sup>th</sup> edition

Schwartz's Textbook of General Surgery. 9<sup>th</sup> edition

Markings: 1<sup>st</sup> exam 20 marks          2<sup>nd</sup> exam 20 marks

Final exam 60 marks