

**Ministry of Higher Education and Scientific Research  
Scientific Supervision and Scientific Evaluation Apparatus  
Directorate of Quality Assurance and Academic Accreditation  
Accreditation Department**



# **Academic Program and Course Description Guide**

**2025**

## **Introduction:**

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

## **Concepts and terminology:**

**Academic Program Description:** The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

**Course Description:** Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

**Program Vision:** An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

**Program Mission:** Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

**Program Objectives:** They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

**Learning Outcomes:** A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

**Teaching and learning strategies:** They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.

## Academic Program Description Form

**University Name:** Fallujah

**Faculty/Institute:** Medicine

**Scientific Department:** Medicine

**Academic or Professional Program Name:** Bachelor of Medicine and General Surgery

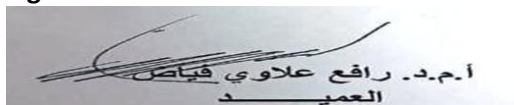
**Final Certificate Name:** Bachelor

**Academic System:** .....

**Description Preparation Date:** 11/5/2025

**File Completion Date:** 11/5/2025

**Signature:**



أ.م.د. رافع علاوي فياض  
العميد

**Head of Department**

**Name:** Assis.Prof.Dr.Rafaa Al-Fayyadh

**Date:** 11/5/2025

**Signature:**



**Scientific Associate**

**Name:** Assis.Prof.Dr.Ali Al-Alosi

**Date:** 11/5/2025

**The file is checked by:**

**Department of Quality Assurance and University Performance**

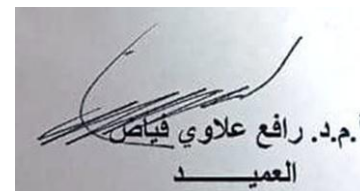
**Director of the Quality Assurance and University Performance Department:**

**Date:** 11/5/2025

**Signature:**



**Dr. Mustafa Saleam**



أ.م.د. رافع علاوي فياض  
العميد

**Approval of the Dean**

## 1. Program Vision

Achieving leadership in medical education and being an effective partner in elevating the academic and health level across Iraq.

## 2. Program Mission

- Educating and training the medical students in a purposeful educational environment to prepare the graduates for distinguished and safe medical practice while consolidating human and scientific values, social principles and quality standards.
- To Graduate doctors who are capable of responding to health needs and challenges, and directing scientific research to solve health problems in society.

## 3. Program Objectives

The academic program at the College of Medicine/University of Fallujah aims to graduate doctors with medical knowledge and skills that qualify them to work in health institutions.

## 4. Program Accreditation

## 5. Other external influences

The official sponsor of our college is the University of Fallujah and under the auspices of the Ministry of Higher Education and Scientific Research.

## 6. Program Structure

| Program Structure        | Number of Courses | Credit hours | Percentage | Reviews* |
|--------------------------|-------------------|--------------|------------|----------|
| Institution Requirements |                   |              |            |          |

|                                |  |  |  |  |
|--------------------------------|--|--|--|--|
| <b>College Requirements</b>    |  |  |  |  |
| <b>Department Requirements</b> |  |  |  |  |
| <b>Summer Training</b>         |  |  |  |  |
| <b>Other</b>                   |  |  |  |  |

\* This can include notes whether the course is basic or optional.

## 7. Program Description

1<sup>st</sup> stage  
1<sup>st</sup> Semester

| Subjects                                 | Lect. Specifications | Hours / Week |           | Credits |
|------------------------------------------|----------------------|--------------|-----------|---------|
|                                          |                      | Theory       | Practical |         |
| Medical Biology                          |                      | 3            | 3         | 4.5     |
| Medical Chemistry                        |                      | 2            | 3         | 3.5     |
| Medical Physics                          | *                    | 2            | 3         | 3.5     |
| Human Anatomy                            |                      | 1            | 2         | 2       |
| Computer Science                         |                      | 1            | 2         | 2       |
| English Language and Medical Terminology |                      | 2            |           | 2       |
| Human Rights & Democracy                 |                      | 1            |           | 1       |
| Baath Party crimes                       |                      | 1            |           | 1       |
| Total                                    |                      |              |           | 19.5    |

2<sup>nd</sup> Semester

| Subjects         | Lect. Specifications | Hours / Week |           | Credits |
|------------------|----------------------|--------------|-----------|---------|
|                  |                      | Theory       | Practical |         |
| Human Anatomy    |                      | 2            | 4         | 4       |
| Medical Biology  |                      | 2            | 3         | 3.5     |
| Biochemistry     |                      | 2            | 3         | 3.5     |
| Medical Physics  |                      | 2            | 3         | 3.5     |
| Computer Science |                      | 1            | 2         | 2       |

|                                          |  |   |  |      |
|------------------------------------------|--|---|--|------|
| English Language and Medical Terminology |  | 2 |  | 2    |
| Human Rights & Democracy                 |  | 1 |  | 1    |
| Total                                    |  |   |  | 19.5 |

2<sup>nd</sup> stage

1<sup>st</sup> Semester

| Subjects             | Lect. Specifications | Hours / Week |           | Credits |
|----------------------|----------------------|--------------|-----------|---------|
|                      |                      | Theory       | Practical |         |
| Human Anatomy        |                      | 3            | 6         | 6       |
| Histology            |                      | 2            | 2         | 3       |
| Human Embryology     |                      | 1            |           | 1       |
| Physiology           |                      | 4            | 3         | 5.5     |
| Medical Biochemistry |                      | 3            | 3         | 4.5     |
| Total                |                      |              |           | 20      |

2<sup>nd</sup> Semester

| Subjects         | Lect. Specifications | Hours / Week |           | Credits |
|------------------|----------------------|--------------|-----------|---------|
|                  |                      | Theory       | Practical |         |
| Human Anatomy    |                      | 3            | 6         | 6       |
| Physiology       |                      | 4            | 3         | 5.5     |
| Histology        |                      | 2            | 2         | 3       |
| Human Embryology |                      | 2            |           | 2       |

3<sup>rd</sup> stage

1<sup>st</sup> Semester

| Subjects                          | Lect. Specifications | Hours / Week |           | Credits |
|-----------------------------------|----------------------|--------------|-----------|---------|
|                                   |                      | Theory       | Practical |         |
| Bacteriology                      |                      | 2            | 2         | 3       |
| Immunology                        |                      | 2            | 2         | 3       |
| Internal Medicine                 |                      | 2            | 2         | 3       |
| Pathology                         |                      | 4            | 3         | 5.5     |
| Community Medicine & Epidemiology |                      | 1            |           | 1       |
| Pharmacology & Therapeutics       |                      | 3            | 2         | 4       |
| Surgery                           |                      | 1            |           | 1       |
| Total                             |                      |              |           | 20.5    |

2<sup>nd</sup> Semester

| Subjects                                  | Lect. Specifications | Hours / Week |           | Credits |
|-------------------------------------------|----------------------|--------------|-----------|---------|
|                                           |                      | Theory       | Practical |         |
| Pathology                                 |                      | 3            | 3         | 4.5     |
| Pharmacology & Therapeutics               |                      | 3            | 2         | 4       |
| Community & Family Medicine               |                      | 2            | 2         | 3       |
| Internal Medicine                         |                      | 2            | 2         | 3       |
| Parasitology                              |                      | 2            | 2         | 3       |
| Microbiology: Virology & Medical Mycology |                      | 2            | 2         | 3       |
| Surgery                                   |                      | 1            |           | 1       |
| Total                                     |                      |              |           | 21.5    |

4<sup>th</sup> stage

| Subjects | Lect. Specifications | Hours / Week | Credits |
|----------|----------------------|--------------|---------|
|----------|----------------------|--------------|---------|

|                             |                                   | Theory | Practical |     |
|-----------------------------|-----------------------------------|--------|-----------|-----|
| Community & Family Medicine |                                   | 3      | 3         | 4.5 |
| Forensic Medicine           |                                   | 2      | 3         | 3.5 |
| Urology                     | Nephrology + Surgery              | 3      |           | 3   |
| Cardiology                  | Medicine + Cardiovascular Surgery | 2      |           | 2   |
| Obstetrics & Gynecology     |                                   | 2      |           | 2   |
| Pediatrics                  |                                   | 2      |           | 2   |
| Respiratory Diseases        |                                   | 2      |           | 2   |
| Total                       |                                   |        |           | 19  |

1<sup>st</sup> Semester

2<sup>nd</sup> Semester

| Subjects                           | Lect. Specifications | Hours / Week |           | Credits |
|------------------------------------|----------------------|--------------|-----------|---------|
|                                    |                      | Theory       | Practical |         |
| Gastroenterology                   | Medicine + Surgery   | 5            |           | 5       |
| Forensic Medicine                  |                      | 2            | 3         | 3.5     |
| Community & Family Medicine        |                      | 3            |           | 3       |
| Pediatrics                         |                      | 2            |           | 2       |
| Endocrinology & Metabolic Diseases |                      | 2            |           | 2       |
| Behavioral Sciences                |                      | 1            |           | 1       |
| Obstetrics & Gynecology            |                      | 1            |           | 1       |
| Total                              |                      |              |           | 17.5    |

| Subjects | Hours / Week | Credits |
|----------|--------------|---------|
|----------|--------------|---------|

|                         | Daily Hours | No. of Weeks | No. of Days / Weeks | Total Hours |   |
|-------------------------|-------------|--------------|---------------------|-------------|---|
| Internal Medicine       | 2           | 8            | 4                   | 64          | 2 |
| Obstetrics & Gynecology | 2           | 8            | 4                   | 64          | 2 |
| Pediatrics              | 2           | 8            | 4                   | 64          | 2 |
| Surgery                 | 2           | 8            | 4                   | 64          | 2 |
| Total                   |             |              |                     |             | 8 |

Clinical Practice

5<sup>th</sup> stage

1<sup>st</sup> Semester

| Subjects                                   | Lect. Specifications                                                                                                                                                                        | Hours / Week |           | Credits |
|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|-----------|---------|
|                                            |                                                                                                                                                                                             | Theory       | Practical |         |
| Orthopedics                                |                                                                                                                                                                                             | 3            |           | 3       |
| Ophthalmology                              |                                                                                                                                                                                             | 2            |           | 2       |
| Neurology                                  | Neuromedicine + Neurosurgery                                                                                                                                                                | 2            |           | 2       |
| Obstetrics & Gynecology                    |                                                                                                                                                                                             | 2            |           | 2       |
| Hematology                                 |                                                                                                                                                                                             | 2            |           | 2       |
| Psychiatry                                 |                                                                                                                                                                                             | 2            |           | 2       |
| Pediatrics                                 |                                                                                                                                                                                             | 1            |           | 1       |
| Total                                      |                                                                                                                                                                                             |              |           | 14      |
| <u>2<sup>nd</sup> Semester</u><br>Subjects | Lect. Specifications                                                                                                                                                                        | Hours / Week |           | Credits |
|                                            |                                                                                                                                                                                             | Theory       | Practical |         |
| Surgery (subspecialties)                   | <ul style="list-style-type: none"> <li>• Head &amp; Neck Surgery</li> <li>• Surgical Emergency</li> <li>• Breast Surgery</li> <li>• Pediatric Surgery</li> <li>• Plastic Surgery</li> </ul> | 3            |           | 3       |
| ENT                                        |                                                                                                                                                                                             | 2            |           | 2       |
| Radiology                                  |                                                                                                                                                                                             | 2            |           | 2       |
| Dermatology                                |                                                                                                                                                                                             | 2            |           | 2       |
| Obstetrics & Gynecology                    |                                                                                                                                                                                             | 1            |           | 1       |
| Pediatrics                                 |                                                                                                                                                                                             | 1            |           | 1       |

|                |  |   |  |    |
|----------------|--|---|--|----|
| Rheumatology   |  | 1 |  | 1  |
| Medical Ethics |  | 1 |  | 1  |
| Total          |  |   |  | 13 |

#### Clinical Practice

| Subjects           | Hours / Week |              |                     |             | Credits |
|--------------------|--------------|--------------|---------------------|-------------|---------|
|                    | Daily Hours  | No. of Weeks | No. of Days / Weeks | Total hours |         |
| Dermatology        | 3            | 3            | 5                   | 45          | 1.5     |
| ENT                | 3            | 3            | 5                   | 45          | 1.5     |
| Neurology          | 3            | 3            | 5                   | 45          | 1.5     |
| Ophthalmology      | 3            | 3            | 5                   | 45          | 1.5     |
| Orthopedics        | 3            | 3            | 5                   | 45          | 1.5     |
| Thoracic Surgery   | 3            | 3            | 5                   | 45          | 1.5     |
| Psychiatry         | 3            | 3            | 5                   | 45          | 1.5     |
| Radiology          | 3            | 3            | 5                   | 45          | 1.5     |
| Urology            | 3            | 3            | 5                   | 45          | 1.5     |
| Surgical Pathology | 3            | 3            | 5                   | 45          | 1.5     |
| Total              |              |              |                     |             | 15      |

#### 6<sup>th</sup> stage Clinical Practice

| Subjects                | Hours / Week |              |                     |             | Credits |
|-------------------------|--------------|--------------|---------------------|-------------|---------|
|                         | Daily Hours  | No. of Weeks | No. of Days / Weeks | Total hours |         |
| Surgery                 | 6            | 15           | 5                   | 450         | 15      |
| Medicine                | 6            | 14           | 5                   | 420         | 14      |
| Obstetrics & Gynecology | 6            | 8            | 5                   | 240         | 8       |

|            |   |   |   |      |    |
|------------|---|---|---|------|----|
| Pediatrics | 6 | 8 | 5 | 240  | 8  |
| Total      |   |   |   | 1350 | 45 |

Credit distribution for 6 years study in the

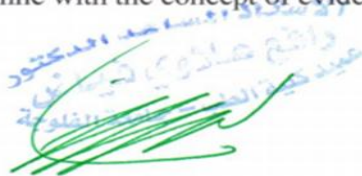
| Credits Specification                                   | Credits |
|---------------------------------------------------------|---------|
| Total Credits for fulfillment of college study          | 254     |
| Clinical training in surgery throughout                 | 27.5    |
| Clinical training in Medicine throughout                | 22.5    |
| Clinical training in Obstetrics & Gynecology throughout | 10      |
| Clinical training in Pediatrics throughout              | 10      |

## 8. Expected learning outcomes of the program

### Outcomes

The main purpose of medical education at the College of Medicine, University of Fallujah is to graduate doctors who have the knowledge, the will and skills that enable them to practice medicine safely while embodying human and ethical values to ensure the achievement of the college's goals. **These goals include the ability to demonstrate competencies in:**

1. Adopting sound medical principles with knowledge of basic sciences and applying them in a safe practical manner.
2. The ability to obtain a medical history efficiently with the ability to perform various clinical examinations.
3. The ability to choose common laboratory and radiological examinations and their correct use and the procedures required to obtain the necessary samples to reach the correct diagnosis of the case.
4. Good knowledge of communication skills with patients, their families, colleagues and all medical workers.
5. Good knowledge of first aid and performing respiratory and cardiopulmonary resuscitation.
6. Working effectively as part of an emergency care team in managing life-threatening cases due to various causes.
7. Knowing the principles of medical ethics and the legal responsibilities arising from practicing the profession.
8. Assisting in general primary health care programs and various family and community medicine specialties.
9. Contributing to scientific research through knowledge of research methods and various measurement methods.
10. Good knowledge of using computers and the ability to deal with various programs for hospital management and outpatient clinics in relation to patient care, health promotion and answering various medical consultations.
11. To be constantly informed of the latest scientific developments and global medical research in line with the concept of evidence-based medicine.



## 9. Teaching and Learning Strategies

Actually lectures

Actually lab. lectures and experiment

Interviews

seminars

Reports

## 10. Evaluation methods

Written exam

oral exam

Lab exam

OSCE

## 11. Faculty

### Faculty Members

| Academic Rank | Specialization |         | Special Requirements/Skills (if applicable) |  | Number of the teaching staff |          |
|---------------|----------------|---------|---------------------------------------------|--|------------------------------|----------|
|               | General        | Special |                                             |  | Staff                        | Lecturer |
|               |                |         |                                             |  |                              |          |

## 12. Acceptance Criterion

The college is subject to the central admission regulations of the Ministry of Higher Education and Scientific Research.

## 13. The most important sources of information about the program

The academic program in our college is based on textbooks, medical sources and references, as well as the website and the latest published research.

## 14. Program Development Plan

The college's plan to develop the academic program is to seek to create a partnership with other international medical colleges in order to exchange

experiences in the field of education and research.



## First year / First semester

### Course Description Form

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                          |
| Medical chemistry                                                          |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                          |
| CHMMed-11                                                                  |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                          |
| 1 <sup>st</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                          |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                          |
| First stage students                                                       |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                          |
| 75                                                                         |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                          |
| Name: Dr. Mustafa abdulkarime<br>Dr. Walied Khalied<br>Email:              |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Course Objectives</b>                                                   | The primary aim of this course is to provide medical students with a foundational understanding of general and organic chemistry, emphasizing its relevance to medical science. The course is designed to equip students with the knowledge and skills necessary to understand chemical principles and their applications in biological systems, clinical practice, and medical research |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Strategy</b>                                                            | Teaching Strategies include theoretical lectures, discussions, practical part and conducting experiments. Evaluation is based on the grades of the theoretical and practical exam and short exams                                                                                                                                                                                        |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                          |

| The week | Hours      | Unit name/topic                    | Required learning outcomes            | Teaching method     | Evaluation method                  |
|----------|------------|------------------------------------|---------------------------------------|---------------------|------------------------------------|
| Week 1   | 2 h theory | Introduction To General Chemistry: | Learn the principles of radiation and | Lecture, Discussion | Summative and formative assessment |

|           |                                    |                                                                                                    |                                                                                                                                                                                                                                  |                        |                                       |
|-----------|------------------------------------|----------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---------------------------------------|
|           | +3 h<br>practical                  | Radioactivity<br>Radiation Dosages<br>Medical Uses Of<br>Radioactive Isotopes                      | methods of<br>calculating radiation<br>doses for treatment<br>purposes.                                                                                                                                                          |                        |                                       |
| Week<br>2 | 2 h<br>theory<br>+3 h<br>practical | <b>Gases &amp; Their<br/>Medical<br/>Relations And<br/>Diffusion Of<br/>Respiratory<br/>Gases</b>  | Identifying gases and<br>their relationship to<br>the medical aspect,<br>in addition to the<br>spread of gases and<br>methods of gas<br>exchange during<br>breathing processes.                                                  | Lecture,<br>Discussion | Summative and formative<br>assessment |
| Week<br>3 | 2 h<br>theory<br>+3 h<br>practical | Aqueous Solutions,<br>Solubility<br>Concentrations<br>of Solutions.                                | understand aqueous<br>solutions and their<br>significance in<br>biological and<br>chemical contexts.                                                                                                                             | Lectures               | Summative and formative<br>assessment |
| Week<br>4 | 2 h<br>theory<br>+3 h<br>practical | Aqueous Solutions<br>:Electrolytes &<br>Non- electrolytes<br>Osmosis & Osmotic<br>Pressure         | The importance of<br>different ions and<br>electrolytes and<br>methods of<br>calculating<br>concentrations in<br>biological models.<br>Learn about the<br>principles of osmosis<br>and its role in<br>medicine.                  | Lecture,<br>Discussion | Summative and formative<br>assessment |
| Week<br>5 | 2 h<br>theory<br>+3 h<br>practical | Acid And Bases<br>pH Buffer Acid-Base<br>Balance In Blood                                          | Calculate pH,<br>explain buffer<br>systems, and their<br>role in maintaining<br>blood pH.                                                                                                                                        | Lectures               | Summative and formative<br>assessment |
| Week<br>6 | 2 h<br>theory<br>+3 h<br>practical | Colloids And Their<br>Properties,<br>Emulsions,<br>Emulsifying Agents<br>Dialysis,<br>Hemodialysis | Learn about the<br>types of dialysis and<br>how it works                                                                                                                                                                         | Lectures               | Summative and formative<br>assessment |
| Week<br>7 | 2 h<br>theory<br>+3 h<br>practical | Rate of reactions,<br>Activation Energy &<br>Chemical<br>Equilibrium                               | Identify the kinetics<br>of enzymatic<br>reactions that occur<br>inside the body.                                                                                                                                                | Lectures               | Summative and formative<br>assessment |
| Week<br>8 | 2 h<br>theory<br>+3 h<br>practical | <b><u>Organic Chemistry:</u><br/><u>Alkane, alkene and</u><br/><u>alkyne.</u></b>                  | Hybridization<br>Double & Triple<br>Bonds, Resonance.<br>Cis and trans<br>conformation<br>Organic structure of<br>triglycerides.<br>Saturated fats, cis-<br>fats and trans-fats ,<br>Health concerns of<br>trans-fats Sources of | Lectures               | Summative and formative<br>assessment |

|         |                              |                                                       |                                                                                                                                       |          |                                    |
|---------|------------------------------|-------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|----------|------------------------------------|
|         |                              |                                                       | aromatic hydrocarbons<br>Polyaromatic hydrocarbons                                                                                    |          |                                    |
| Week 9  | 2 h theory<br>+3 h practical | Aromatic compounds<br>benzene & Heterocyclic Compound | Importance of the aromatic and heterocyclic compounds to the biological systems                                                       | Lectures | Summative and formative assessment |
| Week 10 | 2 h theory<br>+3 h practical | Phenols & Ethers                                      | Biologically important Phenolic Compounds.<br>Health effects of certain Phenols.<br>The importance of the disulfide bonds in proteins | Lectures | Summative and formative assessment |
| Week 11 | 2 h theory<br>+3 h practical | Alcohols                                              | The physiological effects of alcohols                                                                                                 | Lectures | Summative and formative assessment |
| Week 12 | 2 h theory<br>+3 h practical | Aldehydes & Ketones                                   | Biologically important aldehydes and ketones<br>Formation of hemiacetals, imines, and their biological importance                     | Lectures | Summative and formative assessment |
| Week 13 | 2 h theory<br>+3 h practical | Carboxylic Acids: Esters & Thioesters                 | Structures, properties, and biological importance                                                                                     | Lectures | Summative and formative assessment |
| Week 14 | 2 h theory<br>+3 h practical | Stereoisomers                                         | Recognizing Chiral Compounds<br>Optical Activity of enantiomers<br>S and R, Nomenclature<br>Chiral Compounds and Living Systems       | Lectures | Summative and formative assessment |
| Week 15 | 2 h theory<br>+3 h practical | Amines and Ethers                                     | Biologically important amines and ethers<br>Biological importance of quaternary ammonium compounds and Alkaloids                      | Lectures | Summative and formative assessment |

## 11.Course Evaluation

Theoretical and practical exams, short quizzes, and assessments of laboratory performance

## 12. Learning and Teaching Resources

|                                                                       |                                                               |
|-----------------------------------------------------------------------|---------------------------------------------------------------|
| Required textbooks (curricular books, if any)                         | General Chemistry for Medical students                        |
| Main references (sources)                                             | Nothing                                                       |
| Recommended books and references<br>(scientific journals, reports...) | Principles of Biochemistry: Nelson, David L., Cox, Michael M. |
| Electronic References, Websites                                       | Nothing                                                       |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Medical physics                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| PHYPhy-11                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 1 <sup>st</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| First stage students                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 75                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Dr.                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Email:                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Course Objectives</b>                                                   | <p><b>Understanding the Role of Physics in Medicine:</b> To familiarize students with the application of physics in diagnostic and therapeutic techniques.</p> <p><b>Learning Key Technologies:</b> To provide knowledge on medical technologies such as imaging (X-ray, MRI, CT), radiation therapy, and ultrasound.</p>                                                                                                                                                          |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Strategy</b>                                                            | <p>Lectures directly informed to the students from the Professor. Practical training in medical laboratories. The content is presented using slides or whiteboards, with the use of illustrations and diagrams to help understand the material (PowerPoint). The students are divided into small groups to discuss specific topics under the supervision of the Professor. The use of online platforms is to provide recorded lectures, references, and interactive questions.</p> |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Week | Hours | Required learning outcomes           | Unit name/topic                                                                                                                                                                 | Teaching Method                                                                          | Evaluation Method                                                                                                                                  |
|------|-------|--------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 2     | Introduction to medical physics      | Terminology, modeling and measurements                                                                                                                                          | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work |
| 2    | 2     | Forces in the Body                   | Electrical force, nuclear force, gravitational Force                                                                                                                            |                                                                                          |                                                                                                                                                    |
| 3    | 2     | Forces on the Body                   | Static force, dynamic force, frictional force                                                                                                                                   |                                                                                          |                                                                                                                                                    |
| 4    | 2     | Energy, work, and power of the body  | Conservation of energy in the body, units of energy and, energy changes in the body                                                                                             |                                                                                          |                                                                                                                                                    |
| 5    | 2     | Electricity within the body          | Electrical potentials of nerves, electrical signals from muscles, electrical signals from the heart, electrical signals from the eye, magnetic signals from the heart and brain |                                                                                          |                                                                                                                                                    |
| 6    | 2     | Heat and Cold in Medicine            | Physical basis of heat and temperature, The benefits of heat in the body, The applications of heat and cold in medicine, heat therapy                                           |                                                                                          |                                                                                                                                                    |
| 7    | 2     | Heat and Cold in Medicine            | Use of cold in medicine, cryonics, cryosurgery                                                                                                                                  |                                                                                          |                                                                                                                                                    |
| 8    | 2     | Physics of the Cardiovascular System | Major components of the cardiovascular system, work done by the heart, pressure across the blood vessel wall                                                                    |                                                                                          |                                                                                                                                                    |
| 9    | 2     | Physics of the Skeletal System       | Function of bones, bone composition,                                                                                                                                            |                                                                                          |                                                                                                                                                    |

|    |   |                                       |                                                                                                                                        |  |  |
|----|---|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|--|--|
|    |   |                                       | bone remodeling,<br>bone strength                                                                                                      |  |  |
| 10 | 2 | Physics of the<br>Skeletal System     | Bone fracture,<br>measurement of bone<br>density,<br>bone joints                                                                       |  |  |
| 11 | 2 | Pressure part (1)                     | Negative pressure,<br>measurement of<br>pressure in the body,<br>pressure in skeletal                                                  |  |  |
| 12 | 2 | Pressure part (2)                     | The pressure lung, eye<br>pressure, pressure<br>inside the skull                                                                       |  |  |
| 13 | 2 | Basic physic of lung<br>and breathing | Basic physics of the<br>lung and breathing,<br>mechanics and lung<br>volumes, medical<br>physics applications in<br>respiratory health |  |  |
| 14 | 2 | Sound in medicine                     | Properties of sound<br>waves, the human ear<br>and sound perception,<br>doppler effect                                                 |  |  |
| 15 | 2 | Physics of the Ear and<br>Hearing     | The sense of hearing,<br>parts of the ear,<br>testing your hearing                                                                     |  |  |

### 11.Course Evaluation

Multiple choice questions, Short Essays, Problem solving cases, Quizzes

### 12. Learning and Teaching Resources

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| Required textbooks (curricular books, if any)                         |  |
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                            |                                                                                                                                                                                                  |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                  |
| Human Anatomy                                                              |                                                                                                                                                                                                  |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                  |
| ANTAnt-12                                                                  |                                                                                                                                                                                                  |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                  |
| 1 <sup>st</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                  |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                  |
| 11/5/2025                                                                  |                                                                                                                                                                                                  |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                  |
| First stage students                                                       |                                                                                                                                                                                                  |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                  |
| 60                                                                         |                                                                                                                                                                                                  |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                  |
| Name:<br>Dr.<br>Email:                                                     |                                                                                                                                                                                                  |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                  |
| <b>Course Objectives</b>                                                   | 1- Introduce students to basic anatomical concepts.<br>2- Describe the anatomy of the upper and lower extremities.<br>3- Direct students towards the importance of anatomy in clinical practice. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                  |
| <b>Strategy</b>                                                            | 1. Theoretical lectures<br>2. Practical laboratories<br>3. Explanations using presentation slides<br>4. Explanations using plastic samples                                                       |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                  |

| Weeks | Hours                                 | Unit name/topic                                              | Required learning outcomes                                   | Teaching methods                        | Evaluation method                                                |
|-------|---------------------------------------|--------------------------------------------------------------|--------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
| 1     | 2=<br>theoretical<br>2=<br>practical  | Basic Anatomy Concepts<br>Anatomical Terminology             | Basic Anatomy Concepts<br>Anatomical Terminology             | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 2     | 2 =<br>theoretical<br>2=<br>practical | Basic Anatomy Concepts<br>Bones:<br>Anatomy and Radiological | Basic Anatomy Concepts<br>Bones:<br>Anatomy and Radiological | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions             |

|    |                                      | Features                                                                            | Features                                                                            |                                          | and reports                                                       |
|----|--------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------------------------------------------|-------------------------------------------------------------------|
| 3  | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy<br>Superficial structures of the upper limb 1                    | Upper limb anatomy<br>Superficial structures of the upper limb 1                    | Theoretical lectures and practical labs  | Theoretical and practical exams, discussion sessions and reports  |
| 4  | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy<br>Superficial structures of the upper limb<br>2:Brachial Plexus | Upper limb anatomy<br>Superficial structures of the upper limb<br>2:Brachial Plexus | Theoretical lectures and practical labs. | Theoretical and practical exams, discussion sessions and reports. |
| 5  | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy<br>Shoulder muscles.<br>Shoulder joint.                          | Upper limb anatomy<br>Shoulder muscles.<br>Shoulder joint.                          | Theoretical lectures and practical labs  | Theoretical and practical exams, discussion sessions and reports  |
| 6  | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy<br>Armpit:                                                       | Upper limb anatomy<br>Armpit:                                                       | Theoretical lectures and practical labs  | Theoretical and practical exams, discussion sessions and reports  |
| 7  | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy<br>Arm:                                                          | Upper limb anatomy<br>Arm:                                                          | Theoretical lectures and practical labs  | Theoretical and practical exams, discussion sessions and reports  |
| 8  | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy<br>elbow pit and joint                                           | Upper limb anatomy<br>elbow pit and joint                                           | Theoretical lectures and practical labs  | Theoretical and practical exams, discussion sessions and reports  |
| 9  | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy<br>Nerves and blood vessels of the forearm.<br>Radioulnar joint. | Upper limb anatomy<br>Nerves and blood vessels of the forearm.<br>Radioulnar joint. | Theoretical lectures and practical labs  | Theoretical and practical exams, discussion sessions and reports  |
| 10 | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy:<br>Lateral compartment.                                         | Upper limb anatomy:<br>Lateral compartment.                                         | Theoretical lectures and practical       | Theoretical and practical exams,                                  |

|    |                                      |                                                                  |                                                                  |                                         |                                                                  |
|----|--------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
|    |                                      |                                                                  |                                                                  | labs                                    | discussion sessions and reports                                  |
| 11 | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy: Posterior Fascial Compartment of the Forearm | Upper limb anatomy: Posterior Fascial Compartment of the Forearm | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 12 | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy: region of the wrist                          | Upper limb anatomy: region of the wrist                          | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 13 | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy: Hand1                                        | Upper limb anatomy: Hand1                                        | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 14 | 2=<br>theoretical<br>2=<br>practical | Upper limb anatomy: Hand 2                                       | Upper limb anatomy: Hand 2                                       | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 15 | 2=<br>theoretical<br>2=<br>practical | Overview                                                         | Overview                                                         | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |

## 11.Course Evaluation

Following up on attendance and reasons for non-attendance  
Following up on educational supervision regarding the material  
Evaluating students' answers to exam questions related to this aspect

## 12. Learning and Teaching Resources

|                                                                    |                                                                        |
|--------------------------------------------------------------------|------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Moffat DB (1987): Lecture notes on anatomy. Black publications. Oxford |
| Main references (sources)                                          |                                                                        |
| Recommended books and references (scientific journals, reports...) |                                                                        |

Electronic References, Websites

Weir J & Abrahams P: Imaging atlas of the human body (CD)

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                              |
| Biology                                                             |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                              |
| ANTBio-11                                                           |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 1 <sup>st</sup> semester / 1 <sup>st</sup> year                     |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                                                                                                                              |
| First stage students                                                |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 90                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                                                                                                                              |
| Name:<br>Dr.<br>Email:                                              |                                                                                                                                                                                                                                                                                                                                                                                                              |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                                                                                                                              |
| Course Objectives                                                   | 1.Introduce students to basic Biology concepts.<br>2.The student acquires the scientific background and skill to learn Biology examination .<br>Also, knowledge of the basis of genetics and cellular formations of the various body components.<br>3.The student understands the importance of the structure and function of organs and th<br>close relationship between tissues, physiology, biochemistry. |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                                                                                                                              |
| Strategy                                                            | 1.Theoretical lectures<br>2. Practical laboratories<br>3. Explanations using presentation slides<br>4. Explanations using plastic samples                                                                                                                                                                                                                                                                    |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                                                                                                                                                                              |

| Week<br>s | Hours | Unit<br>name/topic | Required<br>learning<br>outcomes | Teachin<br>g<br>method | Evaluatio<br>n method |
|-----------|-------|--------------------|----------------------------------|------------------------|-----------------------|
|-----------|-------|--------------------|----------------------------------|------------------------|-----------------------|

|   |                                               |                                                                                                            |                                                                                                            |                                             |                                |
|---|-----------------------------------------------|------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|
| 1 | 3=<br>theoretical<br>1<br><br>3=<br>Practical | Biology as a science<br>integumentary System.<br>comparative anatomy of Cardiovascular system (I).         | Biology as a science<br>integumentary System.<br>comparative anatomy of Cardiovascular system (I).         | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 2 | 3=<br>theoretical<br>1<br><br>3=<br>Practical | The skeletal system.<br>The appendicular system.<br>Comparative anatomy of Cardiovascular system (II).     | The skeletal system.<br>The appendicular system.<br>Comparative anatomy of Cardiovascular system (II).     | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 3 | 3=<br>theoretical<br>1<br><br>3=<br>Practical | The muscular system.<br>The digestive system.<br>Comparative anatomy of skeletal System(I)                 | The muscular system.<br>The digestive system.<br>Comparative anatomy of skeletal System(I)                 | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 4 | 3=<br>theoretical<br>1<br><br>3=<br>Practical | The respiratory system.<br>The cardiovascular system.<br>Comparative anatomy of skeletal (II). System (II) | The respiratory system.<br>The cardiovascular system.<br>Comparative anatomy of skeletal (II). System (II) | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 5 | 3=<br>theoretical<br>1<br><br>3=<br>Practical | The nervous system<br>The Genito-urinary system<br>Comparative anatomy of CNS.                             | The nervous system<br>The Genito-urinary system<br>Comparative anatomy of CNS.                             | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 6 | 3=<br>theoretical<br>1<br><br>3=<br>Practical | Medical genetics:<br>Cytogenetics<br>Regulation of cell cycle<br>Comparative anatomy of                    | Medical genetics:<br>Cytogenetics<br>Regulation of cell cycle<br>Comparative anatomy of                    | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |

|    |                                           |                                                                                                      |                                                                                                      |                                             |                                |
|----|-------------------------------------------|------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|
|    |                                           | sensory Receptors.                                                                                   | sensory Receptors.                                                                                   | sessions                                    |                                |
| 7  | 3=<br>theoretical<br>1<br>3=<br>Practical | The chromosomes.<br>The chromosomal abnormalities.<br>Comparative anatomy of respiratory System (I)  | The chromosomes.<br>The chromosomal abnormalities.<br>Comparative anatomy of respiratory System (I)  | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 8  | 3=<br>theoretical<br>1<br>3=<br>Practical | The human genome<br>The gene<br>Comparative anatomy of respiratory System (II)                       | The human genome<br>The gene<br>Comparative anatomy of respiratory System (II)                       | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 9  | 3=<br>theoretical<br>1<br>3=<br>Practical | Midterm examination<br>Types of mutations<br>Comparative anatomy of urogenital System (I)            | Midterm examination<br>Types of mutations<br>Comparative anatomy of urogenital System (I)            | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 10 | 3=<br>theoretical<br>1<br>3=<br>Practical | The gene regulation (I)<br>The gene regulation (II)<br>Comparative anatomy of urogenital System (II) | The gene regulation (I)<br>The gene regulation (II)<br>Comparative anatomy of urogenital System (II) | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 11 | 3=<br>theoretical<br>1<br>3=<br>Practical | Inborn errors of metabolism<br>Mendelian laws<br>Comparative anatomy of respiratory System (I)       | Inborn errors of metabolism<br>Mendelian laws<br>Comparative anatomy of respiratory System (I)       | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 12 | 3=<br>theoretical<br>1<br>3=<br>Practical | Mendelian inheritance<br>Quantitative inheritance<br>36.comparative anatomy of                       | Mendelian inheritance<br>Quantitative inheritance<br>36.comparative anatomy of                       | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |

|    |                                           |                                                                                                  |                                                                                                  |                                             |                                |
|----|-------------------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|
|    | Practical                                 | Respiratory system (II)                                                                          | Respiratory system (II)                                                                          | sessions                                    |                                |
| 13 | 3=<br>theoretical<br>1<br>3=<br>Practical | Linkage & recombination<br>The genetics of cancer<br>Comparative anatomy of digestive System (I) | Linkage & recombination<br>The genetics of cancer<br>Comparative anatomy of digestive System (I) | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 14 | 3=<br>theoretical<br>1<br>3=<br>Practical | Genetic engineering<br>Ecology<br>Comparative anatomy of digestive System (II)                   | Genetic engineering<br>Ecology<br>Comparative anatomy of digestive System (II)                   | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 15 | 3=<br>theoretical<br>1<br>3=<br>Practical | Ecology<br>Ecology overview                                                                      | Ecology<br>Ecology overview                                                                      | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |

## 11.Course Evaluation

Following up on attendance and reasons for non-attendance

Following up on educational supervision regarding the material

Evaluating students' answers to exam questions related to this aspect

## 12. Learning and Teaching Resources

|                                                                    |                            |
|--------------------------------------------------------------------|----------------------------|
| Required textbooks (curricular books, if any)                      | BASIC HISTOLOGY (11th. ed) |
| Main references (sources)                                          |                            |
| Recommended books and references (scientific journals, reports...) |                            |
| Electronic References, Websites                                    |                            |

|                                                                     |                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                              |
| Computer Science                                                    |                                                                                                                                                                                                                                                                                                              |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                              |
| Comp.1                                                              |                                                                                                                                                                                                                                                                                                              |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                              |
| 1 <sup>st</sup> semester / 1 <sup>st</sup> year                     |                                                                                                                                                                                                                                                                                                              |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                              |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                              |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                              |
| First stage students                                                |                                                                                                                                                                                                                                                                                                              |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                              |
| 45                                                                  |                                                                                                                                                                                                                                                                                                              |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                              |
| Name:                                                               |                                                                                                                                                                                                                                                                                                              |
| Dr.                                                                 |                                                                                                                                                                                                                                                                                                              |
| Email:                                                              |                                                                                                                                                                                                                                                                                                              |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                              |
| Course Objectives                                                   | <ul style="list-style-type: none"> <li>•Utilize the computer for fundamental tasks.</li> <li>•Identify and discuss the hardware components of the computer system.</li> <li>•Creating documents using a word processor and creating presentations.</li> <li>•Conducting research on the internet.</li> </ul> |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                              |
| Strategy                                                            | 1-Theoretical Lectures<br>2- Practical Labs                                                                                                                                                                                                                                                                  |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                                                                              |

| Week | Hours | Required learning outcomes                                | Unit name/topic                                                                                                                  | Teaching Method                                                                                                                                                                                                                                                                                    | Assessment Method                                                                                                                                   |
|------|-------|-----------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 1     | Introduction to Computer                                  | Concepts of Hardware and Software with their components.                                                                         | <b>1- Theoretical Lectures</b><br><br><b>2- Practical Labs</b><br><br><b>The course will use the following teaching and learning methods:</b> <ul style="list-style-type: none"> <li>• Board (Normal or Smart)</li> <li>• Computers</li> <li>• Presentation software such as PowerPoint</li> </ul> | <ul style="list-style-type: none"> <li>• MCQ</li> <li>• Essay questions</li> <li>• Assessment of the experimental application on the Lab</li> </ul> |
| 2    | 1     | Introduction to Computer (Cont.)                          | Concept of Computing, Data and information; Applications of Information Connecting input/output devices, and Peripherals to CPU. |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 3    | 1     | Computer Components                                       | Computer Portions, Hardware Parts, I/O Units.                                                                                    |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 4    | 1     | Computer Components (Cont.)                               | Memory Types: Volatile and Non-Volatile Memory, Secondary Storage.                                                               |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 5    | 1     | Computer Components (Cont.)                               | CPU Components: Control Unit (CU), Arithmetic Logic Unit (ALU), and Registers.                                                   |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 6    | 1     | Computer Components (Cont.)                               | Computer Ports, Personal Computer (Features and Types).                                                                          |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 7    | 1     | Operating System and Graphical User Interface GUI         | Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques.                                |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 8    | 1     | Operating System and Graphical User Interface GUI (cont.) | Use of Common icons, Status Bar, Using Menu and Menu-selection.                                                                  |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 9    | 1     | Operating System and Graphical User Interface GUI (cont.) | Concept of Folders and Directories, Opening and closing of different Windows; Creating Short cuts.                               |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 10   | 1     | Operating System and Graphical User Interface GUI (cont.) | Customization and Personalization of GUIs, Accessibility Features in GUIs, User Experience (UX).                                 |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 11   | 1     | Word Processing                                           | Word Processing Basics; Basic Features of Word Processors, Opening and Closing of Documents.                                     | <b>1-Theoretical Lectures</b><br><br><b>2- Practical Labs</b>                                                                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>• MCQ</li> <li>• Essay questions</li> <li>• Assessment of the experimental</li> </ul>                        |
| 12   | 1     | Word Processing (cont.)                                   | Text creation and Manipulation; Formatting Text and                                                                              | <b>The course will use the following</b>                                                                                                                                                                                                                                                           |                                                                                                                                                     |

|    |   |                         |                                                            |                                                                                                                                                                                            |                        |
|----|---|-------------------------|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
|    |   |                         | Paragraphs.                                                | <b>teaching and learning methods:</b> <ul style="list-style-type: none"> <li>• Board (Normal or Smart)</li> <li>• Computers</li> <li>• Presentation software such as PowerPoint</li> </ul> | application on the Lab |
| 13 | 1 | Word Processing (cont.) | Using Templates for Document Creation.                     |                                                                                                                                                                                            |                        |
| 14 | 1 | Word Processing (cont.) | Creating and Managing Tables, Utilizing Styles and Themes. |                                                                                                                                                                                            |                        |
| 15 | 1 | Word Processing (cont.) | Spell Check and Grammar Tools, Using Headers and Footers.  |                                                                                                                                                                                            |                        |

## 11.Course Evaluation

MCQ

Essay questions

Assessment of the experimental application on the Lab

## 12. Learning and Teaching Resources

|                                                                    |  |
|--------------------------------------------------------------------|--|
| Required textbooks (curricular books, if any)                      |  |
| Main references (sources)                                          |  |
| Recommended books and references (scientific journals, reports...) |  |
| Electronic References, Websites                                    |  |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                         |
| Medical Terminology                                                        |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                         |
| Term.11                                                                    |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                         |
| 1 <sup>st</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                         |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                         |
| First stage students                                                       |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                         |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                         |
| Name: Assistant Professor Dr. Haitham Tafash                               |                                                                                                                                                                                                                                                                                                                                                                                         |
| Email:                                                                     |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Course Objectives</b>                                                   | -This course provides the student with basic knowledge and skills in medical terminology.<br>This course provides the student with basic knowledge and skills in use standard medical terms in years of study in the medical college.<br>-Providing the student with the basic knowledge and skills in conducting scientific medical ward part that formed the typical 'Medical Terms'. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Strategy</b>                                                            | 1-Theoretical Lectures<br>2- Practical Labs                                                                                                                                                                                                                                                                                                                                             |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                         |

| Week<br>(First course);          | Hours | Unit name/topic/<br>Lecturer name | Teaching method                          | Evaluation<br>method         |
|----------------------------------|-------|-----------------------------------|------------------------------------------|------------------------------|
| 1. Analyzing Medical Terms.      |       |                                   |                                          |                              |
| 2. Common Prefixes and Suffixes. |       |                                   |                                          |                              |
| 3. Common Prefixes and Suffixes. |       |                                   |                                          |                              |
| 4. Common Prefixes and Suffixes. | 1     | Medical Terms                     | Different methods.<br>Classic lecture.   | - Quizzes.<br>- Quick check. |
| 5. Organization of the Body.     | 1     |                                   | Group discussion.<br>Practical sessions. | - End-of-Chapter Exercises   |
| 6. Organization of the Body.     | 1     |                                   |                                          |                              |

|                             |   |  |  |                                                     |
|-----------------------------|---|--|--|-----------------------------------------------------|
| 7. The Skeletal System.     |   |  |  | -Discussion.                                        |
| 8. The Muscular System.     | 1 |  |  | -Theoretical exams.;                                |
| 9. Nervous System.          |   |  |  | - 1. 1st course (mid-exam. + end of exam.).         |
| 10. The Respiratory System. | 1 |  |  | - 2. 2 <sup>nd</sup> course (mid-exam. + end exam.) |
| 11. The Digestive System    | 1 |  |  |                                                     |
| 12. Cardiovascular System.  | 1 |  |  |                                                     |
| 13. Cardiovascular System.  | 1 |  |  |                                                     |
| 14. Cardiovascular System.  | 1 |  |  |                                                     |
| 15. Revision                | 1 |  |  |                                                     |

| 11.Course Evaluation                                               |                                                                                                                                                         |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| MCQ<br>Essay questions                                             |                                                                                                                                                         |
| 12. Learning and Teaching Resources                                |                                                                                                                                                         |
| Required textbooks (curricular books, if any)                      | Medical Terminology Textbooks.<br><b><u>Lectures from many textbooks of medical terminology.</u></b>                                                    |
| Main references (sources)                                          | <b>WHO, and</b> Wolters Kluwer contact.<br>A logical organization guides students through the basic medical terminology, word parts, and word analysis. |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                         |
| Electronic References, Websites                                    |                                                                                                                                                         |

|                                                                     |                                                                                                                                |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                |
| Human rights                                                        |                                                                                                                                |
| 2. Course Code:                                                     |                                                                                                                                |
| Comp.1                                                              |                                                                                                                                |
| 3. Semester / Year:                                                 |                                                                                                                                |
| 1 <sup>st</sup> semester / 1 <sup>st</sup> year                     |                                                                                                                                |
| 4. Description Preparation Date:                                    |                                                                                                                                |
| 11/5/2025                                                           |                                                                                                                                |
| 5. Available Attendance Forms:                                      |                                                                                                                                |
| First stage students                                                |                                                                                                                                |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                |
| 15                                                                  |                                                                                                                                |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                |
| Name:                                                               |                                                                                                                                |
| Dr.                                                                 |                                                                                                                                |
| Email:                                                              |                                                                                                                                |
| 8. Course Objectives                                                |                                                                                                                                |
| Course Objectives                                                   | 1- تعريف الطلبة بحقوق الانسان، وواجباته تجاه مجتمعه<br>2- متابعة الجذور التاريخية لمعرفة حقوق الانسان ومراحل تطورها عبر العصور |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                |
| Strategy                                                            | - محاضرات حضورية<br>- حلقات نقاشية                                                                                             |
| 10. Course Structure                                                |                                                                                                                                |

| الاسبوع | الـ ساعات | مخرجات التعلم المطلوبة               | اسم الوحدة / الموضوع                                                        | طريقة التعليم | طريقة التقييم |
|---------|-----------|--------------------------------------|-----------------------------------------------------------------------------|---------------|---------------|
| 1       | 1         | الاطلاع على البرنامج الدراسي         | عرض المنهاج على الطلبة والخطة الدراسية بغية الالتزام بتنفيذها               | محاضرات       | لا يوجد       |
| 2       | 1         | التعرف بأنواع الحقوق ومجالات تطبيقها | مفهوم الحق وحقوق الانسان<br>- مفهوم الانسان<br>- خصائص وانواع حقوق الانسان. | محاضرات       | نقاش          |
| 3       | 1         | التطور التاريخي لفكرة حقوق الانسان   | حقوق الانسان في العصور القديمة.<br>- فكرة حقوق في الحضارة الغربية           | محاضرات       | نقاش          |

|               |                  |                                                                |                                                |   |   |
|---------------|------------------|----------------------------------------------------------------|------------------------------------------------|---|---|
| امتحان يومي   | محاضرات ومناقشات | - حقوق الانسان في العصور الوسطى - حقوق الانسان في العصر الراهن |                                                | 1 | 4 |
| نقاش          | محاضرات          | -حقوق الانسان في الشرائع السماوية-                             |                                                | 1 | 5 |
| امتحان مفاجئ  | محاضرات          | اهم حقوق الانسان التي نصت عليها الشريعة الاسلامية              |                                                | 1 | 6 |
|               | محاضرات          | الاساس الفكري لتطور حقوق الانسان                               |                                                | 1 | 7 |
| امتحان تحريري | امتحان تحريري    | امتحان ١                                                       |                                                | 1 | 8 |
|               | محاضرات          | نظريات القانون الطبيعي لحقوق الانسان                           |                                                | 1 | 9 |
| نقاش          | محاضرات          | مفهوم المواطنة - حقوق المواطن وواجباته                         |                                                | 1 | 0 |
| نقاش          | محاضرات ومناقشات | دور المنظمات غير الحكومية في الدفاع عن حقوق الانسان            |                                                | 1 | 1 |
|               | محاضرات ومناقشات | حقوق الانسان في الدساتير العراقية السابقة                      |                                                | 1 | 2 |
| نقاش          | محاضرات ومناقشات | الحقوق والحريات في الدستور العراقي لعام ٢٠٠٥                   |                                                | 1 | 3 |
| نقاش          | محاضرات          | الاعلان العالمي لحقوق وحريات الانسان                           | التعريف بالإعلان العالمي لحقوق الانسان واهميته | 1 | 3 |
| نقاش          | محاضرات + نقاش   | حق المرأة - حق الطفل في الاسلام                                |                                                | 1 | 4 |
| امتحان تحريري | امتحان تحريري    | امتحان ٢                                                       |                                                | 1 | 5 |

## 11.Course Evaluation

- امتحانات تحريرية
- امتحانات شفوية

الحضور اليومي•

## 12. Learning and Teaching Resources

|                                                                       |                                                |
|-----------------------------------------------------------------------|------------------------------------------------|
| Required textbooks (curricular books, if any)                         | مادة (حقوق الانسان ) الاستاذ الدكتور حميد حنون |
| Main references (sources)                                             |                                                |
| Recommended books and references<br>(scientific journals, reports...) |                                                |
| Electronic References, Websites                                       |                                                |

**1<sup>st</sup> year / 2<sup>nd</sup> semester**  
**Course Description Form**

|                                                                            |                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                             |
| Biochemistry                                                               |                                                                                                                                                                                                                                                             |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                             |
| CHMMED-12                                                                  |                                                                                                                                                                                                                                                             |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                             |
| 2 <sup>nd</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                                                                             |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                             |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                             |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                             |
| First stage students                                                       |                                                                                                                                                                                                                                                             |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                             |
| 75                                                                         |                                                                                                                                                                                                                                                             |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                             |
| Name: Name: Dr. Mustafa abdulkarime<br>Dr. Walied Khalied<br>Email:        |                                                                                                                                                                                                                                                             |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                             |
| <b>Course Objectives</b>                                                   | The course aims to introduce the importance of the basics of biochemistry and the types and properties of life compounds to medical students and to introduce them to the basic concepts of reactions and terms that they will need in their later studies. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                             |
| <b>Strategy</b>                                                            | Teaching Strategies include theoretical lectures, discussions, practical part and conducting experiments. Evaluation is based on the grades of the theoretical and practical exam and short exams                                                           |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                             |

| <b>Th<br/>e<br/>we<br/>ek</b> | <b>hours</b>                               | <b>Unit name/topic</b>                                                                                                                                                                                          | <b>Required<br/>learning<br/>outcomes</b>                                                                                                         | <b>Evaluat<br/>ion<br/>method</b>  | <b>Teachin<br/>g<br/>method</b>                        |
|-------------------------------|--------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------|
| 1                             | 3 h<br>theor<br>y +3<br>h<br>practi<br>cal | <ul style="list-style-type: none"> <li>- General introduction of biochemistry</li> <li>- Carbohydrates (importance, classification)</li> <li>Monosaccharides Structures and types of Monosaccharides</li> </ul> | Learn the principles of biochemistry and the importance biological for carbohydrates and classification, structures, types and their derivatives. | Summative and formative assessment | Lectures, Small Group Discussions, Laboratory Sessions |
| 2                             | 3 h<br>theor<br>y +3<br>h<br>practi<br>cal | <ul style="list-style-type: none"> <li>- Disaccharides, Oligosaccharides</li> <li>- Homo- and Heteropolysaccharides.</li> <li>- Sugar derivatives</li> </ul>                                                    | Describe the formation, structure, and functions of disaccharides and oligosaccharides.                                                           | Summative and formative assessment | Lectures, Small Group Discussions, Laboratory Sessions |
| 3                             | 3 h                                        | - Lipids,                                                                                                                                                                                                       |                                                                                                                                                   | Summative                          | Lectures,                                              |

|   |                            |                                                                                               |                                                                                                |                                    |                                                        |
|---|----------------------------|-----------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|------------------------------------|--------------------------------------------------------|
|   | theory + 3 h practical     | Biological roles of lipids. Fatty acids classification, lipids classification, Triglycerides. | Explain the biological roles and importance of lipids.                                         | Formative assessment               | Small Group Discussions, Laboratory Sessions           |
| 4 | 3 h theory + 3 h practical | - Compound lipids (phospholipids, Sphingolipids, lipoproteins)                                | Learn about the peptides (structures, their derivatives and its role in medicine).             | Summative and formative assessment | Lectures, Small Group Discussions, Laboratory Sessions |
| 5 | 3 h theory + 3 h practical | - Eicosanoids (prostaglandins, thromboxanes, Leukotrienes), Steroids                          | Learn about the Nucleic acids and their main types in human body                               | Summative and formative assessment | Lectures, Small Group Discussions, Laboratory Sessions |
| 6 | 3 h theory + 3 h practical | - Proteins, Amino acids (structures, classification)                                          | Identify the structures and classification of amino acids and their role in protein formation. | Summative and formative assessment | Lectures, Small Group Discussions, Laboratory Sessions |
| 7 | 3 h theory + 3 h practical | - Peptides, Structural levels of proteins                                                     | Explain peptide bonds and the four structural levels of proteins.                              | Summative and formative assessment | Lectures, Small Group Discussions, Laboratory Sessions |
| 8 | 3 h theory + 3 h practical | - Globular and fibrous proteins,                                                              | Differentiate between globular,                                                                | Summative and formative            | Lectures, Small Group Discussions                      |

|    |                                            |                                                                            |                                                                                                                                                                                                              |                                                      |                                                                               |
|----|--------------------------------------------|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------|
|    | h<br>practi<br>cal                         | Compound<br>and<br>derivative<br>proteins                                  | fibrous,<br>compound,<br>and<br>derivative<br>proteins.                                                                                                                                                      | ve<br>assessm<br>ent                                 | ons,<br>Laborato<br>ry<br>Sessions                                            |
| 9  | 3 h<br>theor<br>y +3<br>h<br>practi<br>cal | - Nucleic<br>acids                                                         | Understand<br>the structure<br>and function<br>of nucleic<br>acids.                                                                                                                                          | Summat<br>ive and<br>formati<br>ve<br>assessm<br>ent | Lectures,<br>Small<br>Group<br>Discussi<br>ons,<br>Laborato<br>ry<br>Sessions |
| 10 | 3 h<br>theor<br>y +3<br>h<br>practi<br>cal | - DNA                                                                      | Describe the<br>structure,<br>replication,<br>and role of<br>DNA.                                                                                                                                            | Summat<br>ive and<br>formati<br>ve<br>assessm<br>ent | Lectures,<br>Small<br>Group<br>Discussi<br>ons,<br>Laborato<br>ry<br>Sessions |
| 11 | 3 h<br>theor<br>y +3<br>h<br>practi<br>cal | - Types of<br>RNA, Role<br>of nucleic<br>acids in<br>proteins<br>synthesis | Identify the<br>types of<br>RNA and<br>their<br>biological<br>role                                                                                                                                           | Summat<br>ive and<br>formati<br>ve<br>assessm<br>ent | Lectures,<br>Small<br>Group<br>Discussi<br>ons,<br>Laborato<br>ry<br>Sessions |
| 12 | 3 h<br>theor<br>y +3<br>h<br>practi<br>cal | - Enzymes<br>(structure,<br>classification<br>)                            | Get to know<br>what it is<br>Enzymes<br>and their<br>types Inside<br>the body of<br>a living<br>organism<br>And<br>Identify the<br>kinetics of<br>enzymatic<br>reactions<br>that occur<br>inside the<br>body | Summat<br>ive and<br>formati<br>ve<br>assessm<br>ent | Lectures,<br>Small<br>Group<br>Discussi<br>ons,<br>Laborato<br>ry<br>Sessions |
| 13 | 3 h<br>theor<br>y +3                       | - Factors<br>affecting<br>enzymatic                                        | Analyze<br>factors<br>influencing                                                                                                                                                                            | Summat<br>ive and<br>formati                         | Lectures,<br>Small<br>Group<br>Discussi                                       |

|    |                                            |                                                                    |                                                                                                       |                                                      |                                                                               |
|----|--------------------------------------------|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------|
|    | h<br>practi<br>cal                         | reaction,<br>Enzymes<br>specificity,<br>enzymes<br>kinetics        | enzyme<br>activity,<br>specificity,<br>and kinetics.                                                  | ve<br>assessm<br>ent                                 | ons,<br>Laborato<br>ry<br>Sessions                                            |
| 14 | 3 h<br>theor<br>y +3<br>h<br>practi<br>cal | - Regulation<br>of metabolic<br>pathways,<br>Enzymes<br>inhibition | Understand<br>the<br>regulation<br>of metabolic<br>pathways<br>and enzyme<br>inhibition<br>mechanisms | Summat<br>ive and<br>formati<br>ve<br>assessm<br>ent | Lectures,<br>Small<br>Group<br>Discussi<br>ons,<br>Laborato<br>ry<br>Sessions |
| 15 | 3 h<br>theor<br>y +3<br>h<br>practi<br>cal | - Enzymes in<br>clinical<br>diagnosis<br>and genetic<br>diseases   | Discuss the<br>role of<br>enzymes in<br>clinical<br>diagnosis<br>and genetic<br>disorders.            | Summat<br>ive and<br>formati<br>ve<br>assessm<br>ent | Lectures,<br>Small<br>Group<br>Discussi<br>ons,<br>Laborato<br>ry<br>Sessions |

## 11.Course Evaluation

Theoretical and practical exams, short quizzes, and assessments of laboratory performance

## 12. Learning and Teaching Resources

|                                                                       |                        |
|-----------------------------------------------------------------------|------------------------|
| Required textbooks (curricular books, if any)                         | Biochemistry by Stryer |
| Main references (sources)                                             | Lehninger Biochemistry |
| Recommended books and references<br>(scientific journals, reports...) |                        |
| Electronic References, Websites                                       |                        |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Medical physics                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| PHYPhs-11                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 2 <sup>nd</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| First stage students                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| 75                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Dr.                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Email:                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Course Objectives</b>                                                   | <p><b>Understanding the Role of Physics in Medicine:</b> To familiarize students with the application of physics in diagnostic and therapeutic techniques.</p> <p><b>Learning Key Technologies:</b> To provide knowledge on medical technologies such as imaging (X-ray, MRI, CT), radiation therapy, and ultrasound.</p>                                                                                                                                                          |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Strategy</b>                                                            | <p>Lectures directly informed to the students from the Professor. Practical training in medical laboratories. The content is presented using slides or whiteboards, with the use of illustrations and diagrams to help understand the material (PowerPoint). The students are divided into small groups to discuss specific topics under the supervision of the Professor. The use of online platforms is to provide recorded lectures, references, and interactive questions.</p> |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Week | Hours | Unit name/topic                | Required learning outcomes                                                                                                                                                                                    | Teaching Method                                                                          | Assessment Method                                                                                                                                  |
|------|-------|--------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 2     | Physics of Ultrasound part (1) | Ultrasound Waves<br>Reflection,<br>Transmission and<br>Absorption,<br>Attenuation of<br>Ultrasound Wave,<br>Half Value<br>Thickness.                                                                          | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work |
| 2    | 2     | Physics of Ultrasound part (1) | Generation of ultrasound,<br>Mechanism of ultrasound imaging,<br>Types of ultrasound modes,                                                                                                                   |                                                                                          |                                                                                                                                                    |
| 3    | 2     | Physics Eyes and vision        | Defective vision and its correction,<br>Instruments used in ophthalmology                                                                                                                                     |                                                                                          |                                                                                                                                                    |
| 4    | 2     | Light in medicine              | Electromagnetic radiation, the energy carried by light,<br>Measurement of light and its units,<br>Applications of visible light,<br>microscopes,<br>Ultraviolet, Infrared,<br>Microwave radiation in medicine |                                                                                          |                                                                                                                                                    |
| 5    | 2     | Laser in Medicine              | Laser types, effect of Laser, Laser-tissue interactions                                                                                                                                                       |                                                                                          |                                                                                                                                                    |
| 6    | 2     | Laser in Medicine              | Applications in medicine                                                                                                                                                                                      |                                                                                          |                                                                                                                                                    |
| 7    | 2     | Types of rays                  | Light Rays, X-rays,<br>Gamma Rays,<br>Cosmic Rays, Alpha Rays, Beta Rays                                                                                                                                      |                                                                                          |                                                                                                                                                    |
| 8    | 2     | Physics of diagnostic x rays   | Physics of X-Rays Imaging, X-ray Tube, Types of X-Rays, X-ray Energy                                                                                                                                          |                                                                                          |                                                                                                                                                    |

|    |   |                                                      |                                                                                                                           |  |  |
|----|---|------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|--|--|
|    |   |                                                      | Spectra, Attenuation of X-rays,                                                                                           |  |  |
| 9  | 2 | Physics of diagnostic x rays                         | Interaction of X-Rays with Matter, Making an X-Ray Image, Radiographic Film, Contrast media                               |  |  |
| 10 | 2 | Physics of Magnetic Resonance Imaging (MRI)          | The principle of NMR, Types of Magnets, Image production by MRI                                                           |  |  |
| 11 | 2 | Physical Principles for imaging By CT Scan Technique | The structure of CT scan machine, Working Principle of CT scan, Physical Principle of CT scanning, Types of CT machines   |  |  |
| 12 | 2 | Physics of nuclear medicine                          | Basic Physics for Nuclear Medicine, Radiopharmaceutical, Medical imaging by radiation                                     |  |  |
| 13 | 2 | Physics of Radiation Therapy                         | Radiation Dose, Factors affecting radiodensity, The Oxygen enhancement of radiation effect, Effect of Radiation on Cancer |  |  |
| 14 | 2 | physical safety                                      | Radioactive pollution                                                                                                     |  |  |
| 15 | 2 | physical safety                                      | Ecological effect of disposed radioactive substances,                                                                     |  |  |

## 11.Course Evaluation

Theoretical and practical exams, short quizzes, and assessments of laboratory performance

## 12. Learning and Teaching Resources

|                                               |                                                                                                                             |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any) | Medical instrumentation application and design (John G. Webster)<br>Ultrasound in medicine and biology (Charles I. I. Chou) |
| Main references (sources)                     |                                                                                                                             |

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                            |                                                                                                                                                                                                  |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                  |
| Human Anatomy                                                              |                                                                                                                                                                                                  |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                  |
| ANTAnt-21                                                                  |                                                                                                                                                                                                  |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                  |
| 2 <sup>nd</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                  |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                  |
| 11/5/2025                                                                  |                                                                                                                                                                                                  |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                  |
| First stage students                                                       |                                                                                                                                                                                                  |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                  |
| 75                                                                         |                                                                                                                                                                                                  |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                  |
| Name:<br>Dr.<br>Email:                                                     |                                                                                                                                                                                                  |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                  |
| <b>Course Objectives</b>                                                   | 1- Introduce students to basic anatomical concepts.<br>2- Describe the anatomy of the upper and lower extremities.<br>3- Direct students towards the importance of anatomy in clinical practice. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                  |
| <b>Strategy</b>                                                            | 1. Theoretical lectures<br>2. Practical laboratories<br>3. Explanations using presentation slides<br>4. Explanations using plastic samples                                                       |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                  |

| Wee<br>ks | Hours                                | Required<br>learning<br>outcomes | Unit<br>name/topic              | Teachin<br>g<br>methods            | Assessm<br>ent<br>method                   |
|-----------|--------------------------------------|----------------------------------|---------------------------------|------------------------------------|--------------------------------------------|
| 1         | 2=theoreti<br>cal<br>3=practic<br>al | Lower<br>limb<br>anatomy<br>The  | Lower<br>limb<br>anatomy<br>The | Theoreti<br>cal<br>lectures<br>and | Theoretic<br>al and<br>practical<br>exams, |

|   |                              |                                                    |                                                    |                                         |                                                                  |
|---|------------------------------|----------------------------------------------------|----------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
|   |                              | Gluteal region                                     | Gluteal region                                     | practical labs                          | discussion sessions and reports                                  |
| 2 | 2=theoretical<br>3=practical | Lower limb anatomy<br>Nerves of the Gluteal Region | Lower limb anatomy<br>Nerves of the Gluteal Region | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 3 | 2=theoretical<br>3=practical | Hip joint                                          | Hip joint                                          | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 4 | 2=theoretical<br>3=practical | Femur                                              | Femur                                              | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 5 | 2=theoretical<br>3=practical | Thigh                                              | Thigh                                              | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 6 | 2=theoretical<br>3=practical | Fascia of the thigh                                | Fascia of the thigh                                | Theoretical lectures and practical labs | Theoretical and practical exams, discussion                      |

|    |                              |                                                                                  |                                                                                  |                                         |                                                                  |
|----|------------------------------|----------------------------------------------------------------------------------|----------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
|    |                              |                                                                                  |                                                                                  |                                         | sessions and reports                                             |
| 7  | 2=theoretical<br>3=practical | Thigh fascia compartment                                                         | Thigh fascia compartment                                                         | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 8  | 2=theoretical<br>3=practical | Medial Fascial compartment                                                       | Medial Fascial compartment                                                       | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 9  | 2=theoretical<br>3=practical | Posterior Fascial compartment                                                    | Posterior Fascial compartment                                                    | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 10 | 2=theoretical<br>3=practical | Lower limb anatomy Popliteal fossa. Anterior and lateral compartments of the leg | Lower limb anatomy Popliteal fossa. Anterior and lateral compartments of the leg | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 11 | 2=theoretical<br>3=practical | Lower limb anatomy Back of foot. Posterior compartment                           | Lower limb anatomy Back of foot. Posterior compartment                           | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions             |

|    |                              |                                                                                              |                                                                                              |                                         |                                                                  |
|----|------------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
|    |                              | nt of leg                                                                                    | nt of leg                                                                                    |                                         | and reports                                                      |
| 12 | 2=theoretical<br>3=practical | Lower limb anatomy<br>Knee joint.<br>Sole of foot                                            | Lower limb anatomy<br>Knee joint.<br>Sole of foot                                            | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 13 | 2=theoretical<br>3=practical | Lower limb anatomy<br>Ankle joint and foot joints.<br>Venous drainage of the lower extremity | Lower limb anatomy<br>Ankle joint and foot joints.<br>Venous drainage of the lower extremity | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 14 | 2=theoretical<br>3=practical | Lower limb anatomy<br>Lower extremity nerve injuries.<br>Standing and walking.               | Lower limb anatomy<br>Lower extremity nerve injuries.<br>Standing and walking.               | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 15 | 2=theoretical<br>3=practical | Lower limb anatomy<br>Lower extremity nerve injuries.<br>Standing and walking.               | Lower limb anatomy<br>Lower extremity nerve injuries.<br>Standing and walking.               | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |

## 11.Course Evaluation

Following up on attendance and reasons for non-attendance  
Following up on educational supervision regarding the material  
Evaluating students' answers to exam questions related to this aspect

| 12. Learning and Teaching Resources                                |                                                                                                              |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Moore KL & Dalley AF (2006): Clinically Oriented Anatomy. 5th Ed. Lippincott Williams & Wilkins Philadelphia |
| Main references (sources)                                          | Snell RS (2011): Clinical anatomy by regions. 9 <sup>th</sup> Williams & Wilkins. Philadelphia               |
| Recommended books and references (scientific journals, reports...) |                                                                                                              |
| Electronic References, Websites                                    |                                                                                                              |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Biology                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                         |
| ANTBio-12                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| 2 <sup>nd</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                         |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                         |
| First stage students                                                       |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                         |
| 90                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Name:<br>Dr.<br>Email:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Course Objectives</b>                                                   | 1.Introduce students to basic Biology concepts.<br>2.The student acquires the scientific background and skill to learn Biology examination . Also, knowledge of the basis of genetics and cellular formations of the various body components.<br>3.The student understands the importance of the structure and function of organs and the close relationship between tissues, physiology, biochemistry. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>Strategy</b>                                                            | 1.Theoretical lectures<br>2. Practical laboratories<br>3. Explanations using presentation slides<br>4. Explanations using plastic samples                                                                                                                                                                                                                                                               |

## 10. Course Structure

| Wee<br>ks | Hours                                    | Unit<br>name/topic                                              | Required<br>learning<br>outcomes                                | Teachi<br>ng<br>metho<br>d                                           | Assess<br>ment<br>method                    |
|-----------|------------------------------------------|-----------------------------------------------------------------|-----------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------|
| 1         | 2=theoret<br>ical<br><br>3=<br>practical | Introduction<br>to cell<br>biology<br>The types of<br>cells     | Introduction<br>to cell<br>biology<br>The types of<br>cells     | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s | Quizzes<br>(theory<br>and<br>practical<br>) |
| 2         | 2=theoret<br>ical<br><br>3=<br>practical | Cytochemist<br>ry<br>The animal<br>cell                         | Cytochemist<br>ry<br>The animal<br>cell                         | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s | Quizzes<br>(theory<br>and<br>practical<br>) |
| 3         | 2=theoret<br>ical<br><br>3=<br>practical | The plasma<br>membrane<br>The cell<br>coat& cell<br>junctions   | The plasma<br>membrane<br>The cell<br>coat& cell<br>junctions   | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s | Quizzes<br>(theory<br>and<br>practical<br>) |
| 4         | 2=theoret<br>ical<br><br>3=<br>practical | The<br>cytoplasm<br>&cytoskelet<br>on<br>The cell<br>organelles | The<br>cytoplasm<br>&cytoskelet<br>on<br>The cell<br>organelles | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session      | Quizzes<br>(theory<br>and<br>practical<br>) |

|   |                                               |                                                                                 |                                                                                 |                                                                      |                                             |
|---|-----------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------|
|   |                                               |                                                                                 |                                                                                 | s                                                                    |                                             |
| 5 | 2=<br>theoretic<br>al.<br><br>3=<br>practical | The<br>endomembra<br>ne<br>system (I)<br>The<br>endomembra<br>ne<br>system (II) | The<br>endomembra<br>ne<br>system (I)<br>The<br>endomembra<br>ne<br>system (II) | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s | Quizzes<br>(theory<br>and<br>practical<br>) |
| 6 | 2=<br>theoretic<br>al.<br><br>3=<br>practical | The<br>centrosomes<br>& nonliving<br>inclusions<br>The nucleus                  | The<br>centrosomes<br>& nonliving<br>inclusions<br>The nucleus                  | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s | Quizzes<br>(theory<br>and<br>practical<br>) |
| 7 | 2=<br>theoretic<br>al.<br><br>3=<br>practical | The cell<br>divisions<br>(mitosis)<br>The cell<br>divisions<br>(meiosis)        | The cell<br>divisions<br>(mitosis)<br>The cell<br>divisions<br>(meiosis)        | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s | Quizzes<br>(theory<br>and<br>practical<br>) |
| 8 | 2=<br>theoretic<br>al.<br><br>3=<br>practical | The<br>epithelial<br>tissues<br>The<br>connective<br>tissues<br>System (II)     | The<br>epithelial<br>tissues<br>The<br>connective<br>tissues<br>System (II)     | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s | Quizzes<br>(theory<br>and<br>practical<br>) |
| 9 | 2=<br>theoretic<br>al.<br><br>3=              | Midterm<br>Examination<br>The<br>muscular &                                     | Midterm<br>Examination<br>The<br>muscular &                                     | lecture<br>s<br>,tutoria<br>ls and                                   | Quizzes<br>(theory<br>and<br>practical      |

|    |                                 |                                                                       |                                                                       |                                             |                                |
|----|---------------------------------|-----------------------------------------------------------------------|-----------------------------------------------------------------------|---------------------------------------------|--------------------------------|
|    | practical                       | nervous tissues                                                       | nervous tissues                                                       | laboratory sessions                         | )                              |
| 10 | 2= theoretical.<br>3= practical | <u>The lower organisms:</u><br>The Kingdom monera<br>The Protozoa (I) | <u>The lower organisms:</u><br>The Kingdom monera<br>The Protozoa (I) | lectures, tutorials and laboratory sessions | Quizzes (theory and practical) |
| 11 | 2= theoretical.<br>3= practical | The Protozoa (II)<br>The Phylum Sarcodina                             | The Protozoa (II)<br>The Phylum Sarcodina                             | lectures, tutorials and laboratory sessions | Quizzes (theory and practical) |
| 12 | 2= theoretical.<br>3= practical | The Phylum Zoomastigina<br>The Phylum ciliophora                      | The Phylum Zoomastigina<br>The Phylum ciliophora                      | lectures, tutorials and laboratory sessions | Quizzes (theory and practical) |
| 13 | 2= theoretical.<br>3= practical | The Phylum sporozoa<br>The Helminthes                                 | The Phylum sporozoa<br>The Helminthes                                 | lectures, tutorials and laboratory sessions | Quizzes (theory and practical) |
| 14 | 2= theoretical                  | The Class trematoda                                                   | The Class trematoda                                                   | lectures                                    | Quizzes (theory                |

|    |                                           |                                                                  |                                                                  |                                                                      |                                             |
|----|-------------------------------------------|------------------------------------------------------------------|------------------------------------------------------------------|----------------------------------------------------------------------|---------------------------------------------|
|    | al.<br>3=<br>practical                    | The Class<br>cestoda                                             | The Class<br>cestoda                                             | ,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s                 | and<br>practical<br>)                       |
| 15 | 2=<br>theoretic<br>al.<br>3=<br>practical | The Phylum<br>nematelminthes<br>The<br>Arthropodes<br>& Overview | The Phylum<br>nematelminthes<br>The<br>Arthropodes<br>& Overview | lecture<br>s<br>,tutoria<br>ls and<br>laborat<br>ory<br>session<br>s | Quizzes<br>(theory<br>and<br>practical<br>) |

## 11.Course Evaluation

Following up on attendance and reasons for non-attendance

Following up on educational supervision regarding the material

Evaluating students' answers to exam questions related to this aspect

## 12. Learning and Teaching Resources

|                                                                       |                            |
|-----------------------------------------------------------------------|----------------------------|
| Required textbooks (curricular books, if any)                         | BASIC HISTOLOGY (11th. ed) |
| Main references (sources)                                             |                            |
| Recommended books and references<br>(scientific journals, reports...) |                            |
| Electronic References, Websites                                       |                            |

|                                                                     |                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                              |
| Computer Science                                                    |                                                                                                                                                                                                                                                                                                              |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                              |
| Comp.1                                                              |                                                                                                                                                                                                                                                                                                              |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                              |
| 2 <sup>nd</sup> semester / 1 <sup>st</sup> year                     |                                                                                                                                                                                                                                                                                                              |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                              |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                              |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                              |
| First stage students                                                |                                                                                                                                                                                                                                                                                                              |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                              |
| 45                                                                  |                                                                                                                                                                                                                                                                                                              |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                              |
| Name:                                                               |                                                                                                                                                                                                                                                                                                              |
| Dr.                                                                 |                                                                                                                                                                                                                                                                                                              |
| Email:                                                              |                                                                                                                                                                                                                                                                                                              |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                              |
| Course Objectives                                                   | <ul style="list-style-type: none"> <li>•Utilize the computer for fundamental tasks.</li> <li>•Identify and discuss the hardware components of the computer system.</li> <li>•Creating documents using a word processor and creating presentations.</li> <li>•Conducting research on the internet.</li> </ul> |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                              |
| Strategy                                                            | 1-Theoretical Lectures<br>2- Practical Labs                                                                                                                                                                                                                                                                  |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                                                                              |

| Week | Hours | Unit name/topic                  | Required learning outcomes                                                                                                   | Teaching Method                                                                                                                                                                                                                                                                                    | Assessment Method                                                                                                                                   |
|------|-------|----------------------------------|------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 1     | Spread Sheet                     | Introduction to Spreadsheet Software, Creating and Formatting Worksheets.                                                    | <b>3- Theoretical Lectures</b><br><br><b>4- Practical Labs</b><br><br><b>The course will use the following teaching and learning methods:</b> <ul style="list-style-type: none"> <li>• Board (Normal or Smart)</li> <li>• Computers</li> <li>• Presentation software such as PowerPoint</li> </ul> | <ul style="list-style-type: none"> <li>• MCQ</li> <li>• Essay questions</li> <li>• Assessment of the experimental application on the Lab</li> </ul> |
| 2    | 1     | Spread Sheet (Cont.)             | Sorting and Filtering Data, Using Formulas and Functions, Using Formulas and Functions, using Pivot Tables for Data Analysis |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 3    | 1     | Spread Sheet (Cont.)             | Data Validation and Error Checking, Data Visualization: Creating Charts and Graphs.                                          |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 4    | 1     | Presentation Software            | Introduction to Presentation Software, Overview of Popular Presentation Tools, Creating a New Presentation.                  |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 5    | 1     | Presentation Software (Cont.)    | Using Templates and Themes, Inserting and Formatting Text and Images, Transition and Animation Effects                       |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 6    | 1     | Presentation Software (Cont.)    | Using Speaker Notes and Timers, Advanced Features: Hyperlinks and Action Buttons.                                            |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 7    | 1     | Presentation Software (Cont.)    | Troubleshooting Common Presentation issues, Future Trends in Presentation Technology.                                        |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 8    | 1     | Introduction to Internet and Web | Computer networks Basic; LAN, WAN.                                                                                           |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |

|    |   |                                                      |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
|----|---|------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
|    |   | Browsers                                             |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 9  | 1 | Introduction to Internet and Web Browsers (Cont.)    | Concept of Internet and its Applications; connecting to internet.                                                                               |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 10 | 1 | Introduction to Internet and Web Browsers (Cont.)    | World Wide Web; Web Browsing software's, Search Engines.                                                                                        |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 11 | 1 | Introduction to Internet and Web Browsers (Cont.)    | Understanding URL; Domain name; IP Address.                                                                                                     |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 12 | 1 | Communications and Emails                            | Basics of electronic mail; Getting an email account; Sending and receiving emails: Accessing sent emails; Using Emails; Document collaboration. | <b>1-Theoretical Lectures</b><br><br><b>2- Practical Labs</b><br><br><b>The course will use the following teaching and learning methods:</b> <ul style="list-style-type: none"> <li>• Board (Normal or Smart)</li> <li>• Computers</li> <li>• Presentation software such as PowerPoint</li> </ul> | <ul style="list-style-type: none"> <li>• MCQ</li> <li>• Essay questions</li> <li>• Assessment of the experimental application on the Lab</li> </ul> |
| 13 | 1 | Communications and Emails (Cont.)                    | Sending and receiving emails; Accessing sent emails; Using Emails; Document collaboration.                                                      |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 14 | 1 | Introduction to Cloud Computing and Services         | Definition of Cloud Computing and its concept, Cloud-Based Office Suites (Office 365 and Google Workspace).                                     |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 15 | 1 | Introduction to Cloud Computing and Services (Cont.) | Google Workspace: Google Docs, Google Sheets, Google Drive, Google Meet                                                                         |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
|    |   |                                                      |                                                                                                                                                 |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |

## 11.Course Evaluation

MCQ  
 Essay questions  
 Assessment of the experimental application on the Lab

| 12. Learning and Teaching Resources                                   |  |
|-----------------------------------------------------------------------|--|
| Required textbooks (curricular books, if any)                         |  |
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                    |
| Medical Terminology                                                        |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                    |
| Term.11                                                                    |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                    |
| 2 <sup>nd</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                    |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                    |
| First stage students                                                       |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                    |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                    |
| Name: Assistant Professor Dr. Haitham Tafash                               |                                                                                                                                                                                                                                                                                                                                                                                    |
| Email:                                                                     |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Course Objectives</b>                                                   | -This course provides the student with basic knowledge and skills in medical terminology.<br>This course provides the student with basic knowledge and skills in use standard medical terms in years of study in the medical college.<br>-Providing the student with the basic knowledge and skills in conducting scientific medical part that formed the typical 'Medical Terms'. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Strategy</b>                                                            | Theoretical Lectures                                                                                                                                                                                                                                                                                                                                                               |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                    |

| Week                                       | Hours | Unit name/topic/<br>Lecturer name | Teaching method                                                                    | Evaluation<br>method                                                                                                                                                                                             |
|--------------------------------------------|-------|-----------------------------------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. The Lymphatic System and Immunity.      | 1     | Medical Terms                     | Different methods.<br>Classic lecture.<br>Group discussion.<br>Practical sessions. | - Quizzes.<br>- Quick check.<br>- End-of-Chapter Exercises<br><br>-Discussion.<br><br>-Theoretical exams.;<br>- 1. 1st course (mid-exam. + end of exam.).<br>- 2. 2 <sup>nd</sup> course (mid-exam. + end exam.) |
| 2. The Endocrine System.                   | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 3. The Urinary System.                     | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 4. The Reproductive System.                | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 5. The Special Sense of Sight and Hearing. | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 6. Integumentary System.                   | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 7. External common term systemic sheets.   | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 8. External common term systemic sheets.   | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 9. External common term systemic sheets.   | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 10. External common term systemic sheets.  | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| 11.,12.,13.,14.                            | 1     |                                   |                                                                                    |                                                                                                                                                                                                                  |
| Revision.                                  |       |                                   |                                                                                    |                                                                                                                                                                                                                  |
| <b>15. Exam.</b>                           |       |                                   |                                                                                    |                                                                                                                                                                                                                  |

| 11.Course Evaluation                          |                                                                                               |
|-----------------------------------------------|-----------------------------------------------------------------------------------------------|
| MCQ<br>Essay questions                        |                                                                                               |
| 12. Learning and Teaching Resources           |                                                                                               |
| Required textbooks (curricular books, if any) | Medical Terminology Textbooks.<br><b>Lectures from many textbooks of medical terminology.</b> |

|                                                                    |                                                                                                                                                         |
|--------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|
| Main references (sources)                                          | <b>WHO, and</b> Wolters Kluwer contact.<br>A logical organization guides students through the basic medical terminology, word parts, and word analysis. |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                         |
| Electronic References, Websites                                    |                                                                                                                                                         |

|                                                                            |                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                          |
| جرائم حزب البعث                                                            |                                                                                                                                                                                                                                                                                          |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                          |
|                                                                            |                                                                                                                                                                                                                                                                                          |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                          |
| 2 <sup>nd</sup> semester / 1 <sup>st</sup> year                            |                                                                                                                                                                                                                                                                                          |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                          |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                          |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                          |
| First stage students                                                       |                                                                                                                                                                                                                                                                                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                          |
| 15                                                                         |                                                                                                                                                                                                                                                                                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                          |
| Name:                                                                      |                                                                                                                                                                                                                                                                                          |
| Email:                                                                     |                                                                                                                                                                                                                                                                                          |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                          |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>- ان يتعرف الطالب على الاوضاع التي كانت سائدة في العراق والتي ادت الى تأسيس حزب البعث</li> <li>- ان يتعرف الطالب على الصراع الذي كان سائد بين الاحزاب خلال تلك المرحلة</li> <li>- ان يتعرف الطالب على اوضاع البلاد بعد تأسيس حزب البعث</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                          |
| <b>Strategy</b>                                                            | Theoretical Lectures                                                                                                                                                                                                                                                                     |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                          |

| الأسبوع | الساعات | مخرجات التعلم المطلوبة                                                     | اسم الوحدة / أو الموضوع                                                    | طريقة التعليم | طريقة التقييم              |
|---------|---------|----------------------------------------------------------------------------|----------------------------------------------------------------------------|---------------|----------------------------|
| ١       | 1       | جرائم نظام البعث وفق قانون المحكمة الجنائية العراقية ٢٠٠٥                  | جرائم نظام البعث وفق قانون المحكمة الجنائية العراقية ٢٠٠٥                  | محاضرات نظرية | امتحان نظري<br>امتحان نظري |
| ٢       | 1       | اقسام الجرائم                                                              | اقسام الجرائم                                                              | محاضرات نظرية |                            |
| ٣ - ٤   | 1       | انواع الجرائم الدولية                                                      | انواع الجرائم الدولية                                                      | محاضرات نظرية |                            |
| ٥       | 1       | الجرائم النفسية والاجتماعية واثارها وابرز انتهاكات النظام البعثي في العراق | الجرائم النفسية والاجتماعية واثارها وابرز انتهاكات النظام البعثي في العراق | محاضرات نظرية |                            |
| ٦       | 1       | آلية الضغط والعقاب النفسي                                                  | آلية الضغط والعقاب النفسي                                                  | محاضرات نظرية |                            |
| ٧       | 1       | عسكرة المجتمع                                                              | عسكرة المجتمع                                                              | محاضرات نظرية |                            |
| ٨ - ٩   | 1       | انتهاكات القوانين العراقية                                                 | انتهاكات القوانين العراقية                                                 | محاضرات نظرية |                            |
| ١٠      | 1       | بعض قرارات الانتهاكات السياسية والعسكرية لنظام البعث                       | بعض قرارات الانتهاكات السياسية والعسكرية لنظام البعث                       | محاضرات نظرية |                            |
| ١١      | 1       | امكن السجون والاحتجاز لنظام البعث                                          | امكن السجون والاحتجاز لنظام البعث                                          | محاضرات نظرية |                            |
| ١٢      | 1       | الجرائم البيئية لنظام البعث في العراق                                      | الجرائم البيئية لنظام البعث في العراق                                      | محاضرات نظرية |                            |
| ١٣      | 1       | استعمال الاسلحة المحرمة دوليا ومخاطر الالغام                               | استعمال الاسلحة المحرمة دوليا ومخاطر الالغام                               | محاضرات نظرية |                            |
| ١٤      | 1       | التلوث بالمواد المشعة                                                      | التلوث بالمواد المشعة                                                      | محاضرات نظرية |                            |
| ١٥      | 1       | تدمير المدن والقرى (سياسة الارض المحروقة)                                  | تدمير المدن والقرى (سياسة الارض المحروقة)                                  | محاضرات نظرية |                            |
| ١٦      | 1       | تجفيف الاهوار                                                              | تجفيف الاهوار                                                              | محاضرات نظرية |                            |
| ١٧      | 1       | تجريف بساتين النخيل والاشجار والمزروعات                                    | تجريف بساتين النخيل والاشجار والمزروعات                                    | محاضرات نظرية |                            |
| ١٨      | 1       | جرائم المقابر الجماعية                                                     | جرائم المقابر الجماعية                                                     | محاضرات نظرية |                            |
| ١٩ - ٢٠ | 1       | احداث المقابر الابداء الجماعية المرتكبة من النظام البعثي في العراق         | احداث المقابر الابداء الجماعية المرتكبة من النظام البعثي في العراق         | محاضرات نظرية |                            |
| ٢١      | 1       | التصنيف الزمني لمقابر الابداء الجماعية في العراق للمدة ١٩٦٣ -              | التصنيف الزمني لمقابر الابداء الجماعية في العراق للمدة ١٩٦٣ -              | محاضرات نظرية |                            |

|                  |                                                                                     |                                                                                     |      |       |  |
|------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|------|-------|--|
|                  |                                                                                     | ٢٠٠٣                                                                                | ٢٠٠٣ |       |  |
| محاضرات<br>نظرية | مقابر الابداء الجماعية<br>المرتكة من قبل نظام<br>البعث البائد للمدة ١٩٧٩-<br>٢٠٠٣م. | مقابر الابداء الجماعية<br>المرتكة من قبل نظام<br>البعث البائد للمدة ١٩٧٩-<br>٢٠٠٣م. | 1    | ٢٢    |  |
| محاضرات<br>نظرية | مقابر الابداء الجماعية<br>لضحايا مجزرة الانفال<br>للمدة ١٩٨٧-١٩٨٨م.                 | مقابر الابداء الجماعية<br>لضحايا مجزرة الانفال<br>للمدة ١٩٨٧-١٩٨٨م.                 | 1    | ٢٣    |  |
| محاضرات<br>نظرية | موقع طريق التنومة-<br>كباسي                                                         | موقع طريق التنومة-<br>كباسي                                                         | 1    | ٢٤    |  |
| محاضرات<br>نظرية | مقبرة خان الربع                                                                     | مقبرة خان الربع                                                                     | 1    | ٢٥    |  |
| محاضرات<br>نظرية | مقبرة الامام بكر                                                                    | مقبرة الامام بكر                                                                    | 1    | ٢٦    |  |
| محاضرات<br>نظرية | مقبرة خانقين- بختياري                                                               | مقبرة خانقين- بختياري                                                               | 1    | ٢٨-٢٧ |  |

**2<sup>nd</sup> year / 1<sup>st</sup> semester**  
**Course Description Form**

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Medical physiology                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| PHYPhy-22                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1 <sup>st</sup> semester / 2 <sup>nd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 2 <sup>nd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 150                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Name:<br>Dr.<br>Email:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Course Objectives</b>                                                   | <p>The aim of medical physiology study for second-stage students focusing on the following topics is to establish a foundational understanding of how the human body functions at cellular and system levels. The key objectives are:</p> <ul style="list-style-type: none"> <li>•Recognize the fundamental roles that cells play in communication through signaling pathways, cellular metabolism, and the flow of ions and chemicals across membranes.</li> <li>•Learn about the components of blood, such as red blood cells, white blood cells, plasma and platelets, as well as their makeup and functions. Examine the mechanisms behind blood coagulation, immunological response, and oxygen delivery.</li> <li>•Learn about the physiology of blood arteries, blood flow control, and the role of the heart as a pump.</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Strategy</b>                                                            | 1-theoretical lectures<br>2-practical labs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

| We<br>ek | hour<br>s        | Unit<br>name/topi<br>c                                       | Required<br>learning<br>outcomes                                                                                                                        | Teachi<br>ng<br>Method      | Assessm<br>ent<br>Method  |
|----------|------------------|--------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------|---------------------------|
| 1        | 4-<br>Theo<br>ry | <b>Cell<br/>physiology</b>                                   | - Membrane<br>junctions<br>- Body fluid<br>- Edema                                                                                                      | Theoreti<br>cal<br>lectures | Quizzes<br>short<br>essay |
| 2        | 4-<br>Theo<br>ry | <b>Blood<br/>Physiology</b>                                  | - Functions of<br>blood<br>- Red blood<br>cells                                                                                                         | Theoreti<br>cal<br>lectures | Quizzes<br>short<br>essay |
| 3        | 4-<br>Theo<br>ry |                                                              | - Hemoglobin<br>- Anemia<br>- White blood<br>cells<br>- Hemostasis                                                                                      | Theoreti<br>cal<br>lectures | Quizzes<br>short<br>essay |
| 4        | 4-<br>Theo<br>ry |                                                              | Pathways of<br>coagulation<br>- Hemophilia<br>- Blood groups<br>- Immunity                                                                              | Theoreti<br>cal<br>lectures | Quizzes<br>short<br>essay |
| 5        | 4-<br>Theo<br>ry | <b>Physiology<br/>of<br/>Cardiovasc<br/>ular<br/>system:</b> | -Introduction to<br>cardiovascular<br>physiology<br>-conducting<br>system<br>-Cardiac<br>contractile cell<br>-Mechanical<br>events in<br>cardiac cycle. | Theoreti<br>cal<br>lectures | Quizzes<br>short<br>essay |
| 6        | 4-<br>Theo<br>ry |                                                              | - Cardiac<br>output.<br>- Function of<br>the atria as<br>pumps<br>- ECG<br>- Heart sounds<br>and murmurs                                                | Theoreti<br>cal<br>lectures | Quizzes<br>short<br>essay |

|    |          |                                         |                                                                                                                                                                                      |                      |                        |
|----|----------|-----------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------|
| 7  | 4-Theory |                                         | <ul style="list-style-type: none"> <li>- Anatomic consideration</li> <li>- Hemodynamics</li> <li>- Blood pressure</li> </ul>                                                         | Theoretical lectures | Quizzes<br>short essay |
| 8  | 4-Theory |                                         | <ul style="list-style-type: none"> <li>- Circulatory regulation.</li> <li>- Circulation through special regions.</li> <li>- Cardiovascular. Hemostasis.</li> </ul>                   | Theoretical lectures | Quizzes<br>short essay |
| 9  | 4-Theory |                                         | <ul style="list-style-type: none"> <li>- Arrhythmia.</li> <li>- Hypotension.</li> <li>- Hypertension.</li> <li>- Heart failure.</li> </ul>                                           | Theoretical lectures | Quizzes<br>short essay |
| 10 | 4-Theory | <b>Physiology of Respiratory system</b> | <ul style="list-style-type: none"> <li>-Physiological functions of the lungs.</li> <li>-Process of respiration mechanics of breathing.</li> <li>- Compliance of the Lung.</li> </ul> | Theoretical lectures | Quizzes<br>short essay |
| 11 | 4-Theory |                                         | <ul style="list-style-type: none"> <li>- Compliance of the lung, role of surfactant.</li> <li>- Transport of O<sub>2</sub> by the blood.</li> </ul>                                  | Theoretical lectures | Quizzes<br>short essay |
| 12 | 4-Theory |                                         | <ul style="list-style-type: none"> <li>- Transport of CO<sub>2</sub> by the blood.</li> <li>- Role of the respiratory system in acid-</li> </ul>                                     | Theoretical lectures | Quizzes                |

|    |          |                                               |                                                                                                                                                                                                                                                                                    |                      |             |
|----|----------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------|
|    |          |                                               | base regulation.<br>- Regulation of breathing.                                                                                                                                                                                                                                     |                      |             |
| 13 | 4-Theory | <b>Muscle and nerve</b>                       | <ul style="list-style-type: none"> <li>- Types of muscle fiber.</li> <li>- Excitation-contraction coupling.</li> <li>- Contraction of a smooth muscle cell.</li> <li>- Mechanical properties in the two muscles.</li> <li>- Changes in voltage-gated membrane channels.</li> </ul> | Theoretical lectures | short essay |
| 14 | 4-Theory |                                               | <ul style="list-style-type: none"> <li>- Anatomic and cellular features of neurons and its relation to their function.</li> <li>- Role of the neuronal cytoskeleton.</li> <li>- The molecular mechanisms of ionic conductance events .</li> </ul>                                  | Theoretical lectures | short essay |
| 15 | 4-Theory | <b>Physiology of autonomic nervous system</b> | <ul style="list-style-type: none"> <li>- The role of the autonomic nervous system.</li> <li>- The anatomic and physiologic bases for</li> </ul>                                                                                                                                    | Theoretical lectures | short essay |

|  |  |  |                                                                                                                                                           |  |  |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  |  |  | division of the autonomic nervous system.<br>- The neurotransmitters.<br>- Types of autonomic innervations and reflex arc.<br>- Neurotransmitter release. |  |  |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

## 11.Course Evaluation

MCQ

Essay questions

Assessment of the experimental application on the Lab

## 12. Learning and Teaching Resources

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| Required textbooks (curricular books, if any)                         |  |
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                                                                              |                                                                                                                                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                                                                              |                                                                                                                                                                                                   |
| Biochemistry                                                                                                                 |                                                                                                                                                                                                   |
| 2. Course Code:                                                                                                              |                                                                                                                                                                                                   |
| CHMBio-21                                                                                                                    |                                                                                                                                                                                                   |
| 3. Semester / Year:                                                                                                          |                                                                                                                                                                                                   |
| 1 <sup>st</sup> semester / 2 <sup>nd</sup> year                                                                              |                                                                                                                                                                                                   |
| 4. Description Preparation Date:                                                                                             |                                                                                                                                                                                                   |
| 11/5/2025                                                                                                                    |                                                                                                                                                                                                   |
| 5. Available Attendance Forms:                                                                                               |                                                                                                                                                                                                   |
| Second stage students                                                                                                        |                                                                                                                                                                                                   |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :                                                                |                                                                                                                                                                                                   |
| 90                                                                                                                           |                                                                                                                                                                                                   |
| 7. Course administrator's name (mention all, if more than one name)                                                          |                                                                                                                                                                                                   |
| Name: Dr. Mustafa Saleam<br>Dr. Abdullah Ali<br>Dr. Mohamed Amer<br>Dr. Ayad abod<br>Email: mustafa.saleam@uofallujah.edu.iq |                                                                                                                                                                                                   |
| 8. Course Objectives                                                                                                         |                                                                                                                                                                                                   |
| Course Objectives                                                                                                            | *Introduce the importance of metabolic reactions within the cells of the human body<br>*The metabolic reactions relationship to various diseases for medical students                             |
| 9. Teaching and Learning Strategies                                                                                          |                                                                                                                                                                                                   |
| Strategy                                                                                                                     | Teaching Strategies include theoretical lectures, discussions, practical part and conducting experiments. Evaluation is based on the grades of the theoretical and practical exam and short exams |
| 10. Course Structure                                                                                                         |                                                                                                                                                                                                   |

| <b>Weeks</b> | <b>Hours</b>               | <b>Unit or subject name</b>                                                                       | <b>Required learning outcomes</b>                                                                       | <b>Teaching method</b>                                  | <b>Evaluation method</b>           |
|--------------|----------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------|
| 1            | 3 h theory + 3 h practical | - Introduction to the Vitamins                                                                    | Understand the basic roles and importance of vitamins in human health.                                  | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 2            | 3 h theory + 3 h practical | -Structure of vitamins                                                                            | Learn the chemical composition and classification of vitamins.                                          | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 3            | 3 h theory + 3 h practical | Fat-Soluble Vitamins (A, D, E, K)                                                                 | Recognize their functions, sources, and effects of deficiency or excess.                                | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 4            | 3 h theory + 3 h practical | Introduction to the Minerals And Trace Elements                                                   | Identify important minerals in the body, their function and metabolic disorders , with following points | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 5            | 3 h theory + 3 h practical | Minerals And Trace Elements                                                                       | Understand their roles in bodily functions and health maintenance.                                      | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 6            | 3 h theory + 3 h practical | - Daily Intakes and deficiency of Sodium, Potassium, Magnesium, Manganese, Zinc, Copper, Selenium | Identify recommended intakes and symptoms of deficiencies.                                              | Theoretical lectures                                    | Summative and formative assessment |
| 7            | 3 h theory + 3 h practical | Endocrinology                                                                                     | Understand Hormone Function,                                                                            | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |

|    |                            |                                                                                                                                            |                                                                         |                                                         |                                    |
|----|----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------|---------------------------------------------------------|------------------------------------|
| 8  | 3 h theory + 3 h practical | -Functions And Importance Of Hormones                                                                                                      | Learn how hormones regulate bodily processes.                           | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 9  | 3 h theory + 3 h practical | -Peptide H. Protein H, Amino Acid Derivative and hormones                                                                                  | Understand the structure and types of hormones.                         | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 10 | 3 h theory + 3 h practical | -Biochemical Actions Of Hormones, Regulation Of Hormonal Actions And Secretions<br>-Types of Endocrine Dysfunction                         | Explore how hormones function and are controlled.                       | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 11 | 3 h theory + 3 h practical | General introduction to the Carbohydrates metabolism                                                                                       | Understand the role of carbohydrates in energy production.              | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 12 | 3 h theory + 3 h practical | Carbohydrates metabolism: Digestion And Absorption<br>Glycolysis, Gluconeogenesis<br>Glycogenesis,                                         | Learn how carbohydrates are broken down and absorbed.                   | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 13 | 3 h theory + 3 h practical | Carbohydrates metabolism: Identify the steps of sugar oxidation and phosphorylation                                                        | Identify key metabolic processes.                                       | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 14 | 3 h theory + 3 h practical | Carbohydrates metabolism:<br>-Identify the condition of sugar metabolism disorder in the body and what diseases arise from it<br>-Diabetes | Recognize conditions like diabetes and their causes.                    | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |
| 15 | 3 h theory + 3 h practical | Carbohydrates metabolism: Identify diseases and disorders and know the causes of the disorder                                              | Identify disorders related to carbohydrate metabolism and their causes. | Theoretical exams, discussion hours and practical exams | Summative and formative assessment |

|                                                                    |                                                                                                                                                            |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 11.Course Evaluation                                               |                                                                                                                                                            |
| Theoretical lectures, discussion hours and practical experiments   |                                                                                                                                                            |
| 12. Learning and Teaching Resources                                |                                                                                                                                                            |
| Required textbooks (curricular books, if any)                      | 1.Lippincott's Biochemistry                                                                                                                                |
| Main references (sources)                                          | 2.Murray RK, Bender DA, Botham KM , Kennelly PJ, Rodwell , & Anthony Weil P (2009) : Harper's Illustrated Biochemistry, by The McGraw-Hill Companies, Inc. |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                            |
| Electronic References, Websites                                    |                                                                                                                                                            |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Embriology                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| ANTEmb-21                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1 <sup>st</sup> semester / 2 <sup>nd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Second stage students                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Course Objectives</b>                                                   | 1. Understanding developmental processes to provide a comprehensive understanding of the stages and mechanisms of embryonic development, from fertilization to the formation of complex structures and organ systems.<br>2. understand the clinical relevance of embryology, particularly in the context of congenital anomalies, reproductive technologies, and regenerative medicine.<br>3. Teaching gametogenesis, bilaminar and trilaminar germ disc formation. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Strategy</b>                                                            | <ul style="list-style-type: none"> <li>•Discussing embryological origins of congenital anomalies (e.g., cleft palate, spina bifida).</li> <li>•Integrating embryology into clinical case discussions during medical training.</li> <li>•Highlights the practical importance of embryology in diagnosing and treating conditions.</li> </ul>                                                                                                                         |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Weeks | Hours        | Required learning outcomes                                | Unit or subject name                                      | Teaching method | Assessment method |
|-------|--------------|-----------------------------------------------------------|-----------------------------------------------------------|-----------------|-------------------|
| 1     | 1=<br>theory | Introduction to embryology.<br>Importance of Embryology.  | Introduction to embryology.<br>Importance of Embryology.  | lectures        | Quizzes (theory)  |
| 2     | 1=<br>theory | Female gametes.<br>Stages of Maturation of Follicles, The | Female gametes.<br>Stages of Maturation of Follicles, The | lectures        | Quizzes (theory)  |

|    |           | Stages of Menstrual Cycle                                                          | Stages of Menstrual Cycle                                                          |          |                  |
|----|-----------|------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|----------|------------------|
| 3  | 1= theory | Male gametes. Abnormal gametes.                                                    | Male gametes. Abnormal gametes.                                                    | lectures | Quizzes (theory) |
| 4  | 1= theory | Ovarian cycle.                                                                     | Ovarian cycle.                                                                     | lectures | Quizzes (theory) |
| 5  | 1= theory | Fertilization.                                                                     | Fertilization.                                                                     | lectures | Quizzes (theory) |
| 6  | 1= theory | Cleavage & implantation of the zygote, The Abnormal Site of Implantation.          | Cleavage & implantation of the zygote, The Abnormal Site of Implantation.          | lectures | Quizzes (theory) |
| 7  | 1= theory | The second week of gestation.                                                      | The second week of gestation.                                                      | lectures | Quizzes (theory) |
| 8  | 1= theory | The 3rd week of gestation.                                                         | The 3rd week of gestation.                                                         | lectures | Quizzes (theory) |
| 9  | 1= theory | Scheduled examination.                                                             | Scheduled examination.                                                             | lectures | Quizzes (theory) |
| 10 | 1= theory | Organogenesis. Embryonic development from 4 <sup>th</sup> to 8 <sup>th</sup> week. | Organogenesis. Embryonic development from 4 <sup>th</sup> to 8 <sup>th</sup> week. | lectures | Quizzes (theory) |
| 11 | 1= theory | Somites                                                                            | Somites                                                                            | lectures | Quizzes (theory) |
| 12 | 1= theory | The fetal membranes.                                                               | The fetal membranes.                                                               | lectures | Quizzes (theory) |
| 13 | 1= theory | The placenta.                                                                      | The placenta.                                                                      | lectures | Quizzes (theory) |
| 14 | 1= theory | Teratology                                                                         | Teratology                                                                         | lectures | Quizzes (theory) |
| 15 | 1= theory | The birth defects.                                                                 | The birth defects.                                                                 | lectures | Quizzes (theory) |

## 11. Course Evaluation

1. Short exams
2. Theoretical mid-term exam
3. Theoretical final exam
4. Seminars.

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Sadler TW (2000): Langman's medical embryology. 3rd Ed. William & Wilkins. Philadelphia.

|                                                                       |                                                                                  |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Main references (sources)                                             | LARSEN'S HUMAN EMBRYOLOGY<br>High-Yield Embryology-Lippincott Williams & Wilkins |
| Recommended books and references<br>(scientific journals, reports...) |                                                                                  |
| Electronic References, Websites                                       |                                                                                  |

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|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                    |
| Anatomy                                                                    |                                                                                                                                                                                                                    |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                    |
| ANTAnt-22                                                                  |                                                                                                                                                                                                                    |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                    |
| 1 <sup>st</sup> semester / 2 <sup>nd</sup> year                            |                                                                                                                                                                                                                    |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                    |
| 11/5/2025                                                                  |                                                                                                                                                                                                                    |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                    |
| Second stage students                                                      |                                                                                                                                                                                                                    |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                    |
| 135                                                                        |                                                                                                                                                                                                                    |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                    |
|                                                                            |                                                                                                                                                                                                                    |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                    |
| <b>Course Objectives</b>                                                   | 1- detailed knowledge about the human body's structure, including organs, tissues, and systems, and their interrelationships.<br>2- Describe the anatomy of the thoracic cage, pelvis, head and neck, and abdomen. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                    |
| <b>Strategy</b>                                                            | Linking the presentation of the basic material to the clinical benefit, Ideal use of time discussions with students.                                                                                               |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                    |

| Weeks | Hour | Subjects | Teaching methods | Assessment methods |
|-------|------|----------|------------------|--------------------|
|-------|------|----------|------------------|--------------------|

|   |                                |                      |                                                                                  |                                                  |                                                                           |
|---|--------------------------------|----------------------|----------------------------------------------------------------------------------|--------------------------------------------------|---------------------------------------------------------------------------|
| 1 | 3= theoretical<br>6 =practical | Chest<br>Anatomy     | Anatomy of the<br>intercostal space.<br>Pleura.<br><br>Lung                      | Theoretical<br>lectures and<br>practical<br>labs | Theoretical and<br>practical exams,<br>discussion sessions<br>and reports |
| 2 | 3=theoretical<br>6 =practical  | Chest<br>Anatomy     | Heart: Pericardium.                                                              | Theoretical<br>lectures and<br>practical<br>labs | Theoretical and<br>practical exams,<br>discussion sessions<br>and reports |
| 3 | 3=theoretical<br>6 =practical  | Chest<br>Anatomy     | Anterior<br>mediastinum.<br>Superior<br>mediastinum.<br>Posterior<br>mediastinum | Theoretical<br>lectures and<br>practical<br>labs | Theoretical and<br>practical exams,<br>discussion sessions<br>and reports |
| 4 | 3=theoretical<br>6 =practical  | abdominal<br>anatomy | Abdominal wall.<br>Inguinal region and<br>testicle                               | Theoretical<br>lectures and<br>practical<br>labs | Theoretical and<br>practical exams,<br>discussion sessions<br>and reports |
| 5 | 3=theoretical<br>6 =practical  | abdominal<br>anatomy | General<br>organization of the<br>peritoneum.<br>Peritoneal spaces               | Theoretical<br>lectures and<br>practical<br>labs | Theoretical and<br>practical exams,<br>discussion sessions<br>and reports |
| 6 | 3=theoretical<br>6 =practical  | abdominal<br>anatomy | Esophagus,<br>stomach, spleen,<br>duodenum,<br>pancreas                          | Theoretical<br>lectures and<br>practical<br>labs | Theoretical and<br>practical exams,<br>discussion sessions<br>and reports |
| 7 | 3=theoretical<br>6=practical   | abdominal<br>anatomy | Liver and biliary<br>system                                                      | Theoretical<br>lectures and<br>practical<br>labs | Theoretical and<br>practical exams,<br>discussion sessions<br>and reports |
| 8 | 3= theoretical<br>6 =practical | abdominal<br>anatomy | Small intestine.<br>Large intestine.<br>Blood supply to the<br>digestive system  | Theoretical<br>lectures and<br>practical<br>labs | Theoretical and<br>practical exams,<br>discussion sessions<br>and reports |
| 9 | 3= theoretical<br>6 =practical | abdominal<br>anatomy | Posterior<br>abdominal wall:                                                     | Theoretical<br>lectures and<br>practical         | Theoretical and<br>practical exams,<br>discussion sessions                |

|    |                                |                |                                                                                                  |                                         |                                                                  |
|----|--------------------------------|----------------|--------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
|    |                                |                |                                                                                                  | labs                                    | and reports                                                      |
| 10 | 3= theoretical<br>6 =practical | Pelvic anatomy | Pelvic walls 1                                                                                   | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 11 | 3= theoretical<br>6 =practical | Pelvic anatomy | Pelvic walls 2                                                                                   | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 12 | 3=theoretical<br>6=practical   | Pelvic anatomy | Male internal reproductive organs.                                                               | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 13 | 3= theoretical<br>6 =practical | Pelvic anatomy | Female internal reproductive organs.                                                             | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 14 | 3= theoretical<br>6 =practical | Pelvic anatomy | Blood vessels and nerves in the pelvis                                                           | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 15 | 3= theoretical<br>6 =practical | Pelvic anatomy | Perineum:<br>urogenital triangle.<br>External genitalia.<br>Anal triangle and ischiorectal fossa | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |

## 11.Course Evaluation

1. Short exams
2. Theoretical mid-term exam
3. Theoretical final exam
4. Seminars.

## 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)

- Moore KL & Dalley AF (2006): Clinically Oriented Anatomy  
Ed. Lippincott Williams & Wilkins. Philadelphia

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                     |                                                                                                                                                                                                                                                                                                                                       |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                                                       |
| Histology                                                           |                                                                                                                                                                                                                                                                                                                                       |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                                                       |
|                                                                     |                                                                                                                                                                                                                                                                                                                                       |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                                                       |
| 1 <sup>st</sup> semester / 2 <sup>nd</sup> year                     |                                                                                                                                                                                                                                                                                                                                       |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                                                       |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                                                       |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                                                       |
| Second stage students                                               |                                                                                                                                                                                                                                                                                                                                       |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                                                       |
| 60                                                                  |                                                                                                                                                                                                                                                                                                                                       |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                                                       |
|                                                                     |                                                                                                                                                                                                                                                                                                                                       |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                                                       |
| <b>Course Objectives</b>                                            | 1. Understand the basic principles of tissue preparation and staining techniques used in histology.<br>2. Identify and differentiate between the four basic types of tissues: epithelial, connective muscular, and nervous.<br>3. Recognize the histological features of various organs and understand their functional significance. |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                                                       |
| <b>Strategy</b>                                                     | oDelivered in person or online, covering theoretical concepts of histology, including tissue types, organ systems, and staining techniques.<br>oUse of visual aids such as diagrams, photomicrographs, and animations to enhance understanding.                                                                                       |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                                                                                                       |

| <b>Weeks</b> | <b>Hours</b>              | <b>Subjects</b>                                                                                             | <b>Teaching method</b>                      | <b>Assessment method</b>       |
|--------------|---------------------------|-------------------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|
| 1            | 2= Theory<br>2= Practical | Epithelial tissue, classification & function.<br>Membranes and cell adhesion & cell surface specialization. | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 2            | 2= Theory<br>2= Practical | Epithelial glands.<br>Connective tissue ground substance & types of fibers.                                 | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 3            | 2= Theory<br>2= Practical | Connective tissue cells.<br>Types of connective tissue                                                      | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 4            | 2= Theory<br>2= Practical | Fiber typing.                                                                                               | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 5            | 2= Theory<br>2= Practical | Modified connective tissue:<br>Cartilage.<br>Bone & ossification.                                           | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 6            | 2= Theory<br>2= Practical | Blood & blood cells<br>Hemopoiesis                                                                          | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 7            | 2= Theory<br>2= Practical | Muscles: skeletal muscles.<br>Mechanism of contraction                                                      | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 8            | 2= Theory<br>2= Practical | Cardiac & smooth muscles.<br>Skin :Epidermis , Dermis & subcutaneous tissue.                                | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 9            | 2= Theory<br>2= Practical | Skin and Glands of the skin.                                                                                | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 10           | 2= Theory<br>2= Practical | Midterm exam (Theory).<br>Hair and Hair follicle                                                            | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 11           | 2= Theory<br>2= Practical | Synapses & supporting tissue<br>Nerve fibers, nerve and ganglia<br>Cerebrum, Cerebellum & spinal            | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |

|    |                           |                                                                                                  |                                             |                                |
|----|---------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|
|    |                           | cord                                                                                             |                                             |                                |
| 12 | 2= Theory<br>2= Practical | The Circulatory System & Capillaries<br>AV anastomosis, arteries, Veins & lymph vessels          | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 13 | 2= Theory<br>2= Practical | Blood vessels and Arteries, Elastic Artery, Muscular arteries, medium artery, Arterioles, veins, | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 14 | 2= Theory<br>2= Practical | Lymph Nodes & Tonsils, Thymus. Spleen.                                                           | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 15 | 2= Theory<br>2= Practical | Female reproductive system                                                                       | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |

| 11.Course Evaluation                                                                        |                                                                                                                       |
|---------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|
| 1. Short exams<br>2. Theoretical mid-term exam<br>3. Theoretical final exam<br>4. Seminars. |                                                                                                                       |
| 12. Learning and Teaching Resources                                                         |                                                                                                                       |
| Required textbooks (curricular books, if any)                                               | Junqueira LC & Carnerio J (2013) : Basic Histology; Text & Atlas. 11 <sup>th</sup> ed.                                |
| Main references (sources)                                                                   | McGraw-Hill Medical. New York.<br>Victor P. Eroschenko (2008): Difiore's atlas of histology & functional correlation. |
| Recommended books and references (scientific journals, reports...)                          |                                                                                                                       |
| Electronic References, Websites                                                             |                                                                                                                       |

|                                                                     |                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                               |
| Computer Science                                                    |                                                                                                                                                                                                                                                               |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                               |
|                                                                     |                                                                                                                                                                                                                                                               |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                               |
| 1 <sup>st</sup> semester / 2 <sup>nd</sup> year                     |                                                                                                                                                                                                                                                               |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                               |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                               |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                               |
| Second stage students                                               |                                                                                                                                                                                                                                                               |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                               |
| 45                                                                  |                                                                                                                                                                                                                                                               |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                               |
|                                                                     |                                                                                                                                                                                                                                                               |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                               |
| <b>Course Objectives</b>                                            | <ul style="list-style-type: none"> <li>•Utilize the computer for fundamental tasks.</li> <li>•Identify and discuss the hardware components of the computer system.</li> <li>•Creating documents using a word processor and creating presentations.</li> </ul> |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                               |
| <b>Strategy</b>                                                     | 1-Theoretical Lectures<br>2- Practical Labs                                                                                                                                                                                                                   |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                               |

| Week | Hours | Unit name/topic                 | Required learning outcomes                                                                                                       | Teaching Method                                                                                                                                                                                                                                                                                    | Assessment Method                                                                                                                                   |
|------|-------|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 1     | Security and Networking         | What is a network? Types of networks. Basic network components.                                                                  | <b>5- Theoretical Lectures</b><br><br><b>6- Practical Labs</b><br><br><b>The course will use the following teaching and learning methods:</b> <ul style="list-style-type: none"> <li>• Board (Normal or Smart)</li> <li>• Computers</li> <li>• Presentation software such as PowerPoint</li> </ul> | <ul style="list-style-type: none"> <li>• MCQ</li> <li>• Essay questions</li> <li>• Assessment of the experimental application on the Lab</li> </ul> |
| 2    | 1     | Security and Networking (Cont.) | Basic network components.                                                                                                        |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 3    | 1     | Security and Networking (Cont.) | Network Security Basics<br>Understanding network threats.<br>Network Troubleshooting                                             |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 4    | 1     | Security and Networking (Cont.) | Introduction to Network Troubleshooting, Common Network issues and Symptoms, Network Troubleshooting Tools and Utilities.        |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 5    | 1     | Security and Networking (Cont.) | Using Command-Line Tools for Diagnostics, Identifying and Resolving Connectivity Issues, Diagnosing Network Performance Problems |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 6    | 1     | E-commerce                      | Concepts of Electronic banking services this include online banking: ATM and debit card services.                                |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |
| 7    | 1     | E-Commerce (Cont.)              | Phone banking, SMS banking, electronic alert, Mobile banking                                                                     |                                                                                                                                                                                                                                                                                                    |                                                                                                                                                     |

|    |   |                                  |                                                                                                                                |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
|----|---|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 8  | 1 | Computer Troubleshooting         | Introduction to Computer Troubleshooting, Common Hardware Issues and Solutions, Diagnosing Software Problems.                  | <b>1-Theoretical Lectures</b><br><br><b>2- Practical Labs</b><br><br><b>The course will use the following teaching and learning methods:</b> <ul style="list-style-type: none"> <li>• Board (Normal or Smart)</li> <li>• Computers</li> <li>• Presentation software such as PowerPoint</li> </ul> | <ul style="list-style-type: none"> <li>• MCQ</li> <li>• Essay questions</li> <li>• Assessment of the experimental application on the Lab</li> </ul> |
| 9  | 1 | Computer Troubleshooting (Cont.) | Hardware Components: Diagnosis and Repair, Using Safe Mode for Troubleshooting.                                                |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 10 | 1 | Computer Troubleshooting (Cont.) | Troubleshooting Operating System Issues, identifying and Resolving Blue Screen Errors, Dealing with Slow Computer Performance. |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 11 | 1 | Computer Troubleshooting (Cont.) | Virus and Malware Removal Techniques, Updating Drivers and Software.                                                           |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 12 | 1 | Introduction to AI               | Definition of AI, History of AI, AI Techniques and Approaches.                                                                 |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 13 | 1 | Introduction to AI (Cont.)       | Key Characteristics of AI, Benefits of AI, Challenges and Ethical considerations.                                              |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 14 | 1 | Introduction to AI (Cont.)       | Challenges and Limitations of AI, The Role of Data in AI Systems.                                                              |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |
| 15 | 1 | Introduction to AI (Cont.)       | AI Tools and Frameworks                                                                                                        |                                                                                                                                                                                                                                                                                                   |                                                                                                                                                     |

### 11.Course Evaluation

1. Short exams
2. Theoretical mid-term exam
3. Theoretical final exam
4. Seminars.

| 12. Learning and Teaching Resources                                   |  |
|-----------------------------------------------------------------------|--|
| Required textbooks (curricular books, if any)                         |  |
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

**2<sup>nd</sup> year / 2<sup>nd</sup> semester**  
**Course Description Form**

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                          |
| Medical physiology                                                         |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                          |
| PHYPhy-22                                                                  |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                          |
| 2 <sup>nd</sup> semester / 2 <sup>nd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                          |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                          |
| Second stage students                                                      |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                          |
| 105                                                                        |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                          |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Course Objectives</b>                                                   | <p>he objective of second-stage medical physiology coursework is to provide students a thorough grasp of how the human body works in normal circumstances, with a special emphasis on the subjects you highlighted. Students who possess this information will be better equipped to diagnose, treat, and manage a wide range of illnesses and conditions the future</p> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Strategy</b>                                                            | <p>1-Theoretical Lectures<br/>2- Practical Labs</p>                                                                                                                                                                                                                                                                                                                      |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                          |

| <b>Week</b> | <b>Hours</b> | <b>Unit name/topic</b>                                   | <b>Required learning outcomes</b>                                                                                                                                                                                                                                   | <b>Teaching Method</b> | <b>Assessment Method</b> |
|-------------|--------------|----------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------|
| <b>1</b>    | Theory4      | <b>Central Nervous System</b>                            | <ul style="list-style-type: none"> <li>- Introduction of Nervous System.</li> <li>- C.N.S Inhibition.</li> <li>- Sensory Functions of The CNS.</li> <li>- Classification of Nerve Fibers.</li> <li>- Central Inhibition Of Pain.</li> </ul>                         | Theoretical lectures   | short essay<br>Quizzes   |
| <b>2</b>    | Theory4      |                                                          | <ul style="list-style-type: none"> <li>- The Somatosensory System.</li> <li>- Higher Interpretation of Sensory Signals.</li> <li>- Higher Levels of Integration.</li> <li>- Control of The Brain Stem and Spinal Cord Reflexes.</li> <li>- Motor Cortex.</li> </ul> | Theoretical lectures   | short essay<br>Quizzes   |
| <b>3</b>    | Theory4      |                                                          | <ul style="list-style-type: none"> <li>- Extra-Pyramidal System</li> <li>- Control of The Brain Stem and Spinal Cord Reflexes.</li> <li>- Language Learning &amp; Memory.</li> </ul>                                                                                | Theoretical lectures   | short essay              |
| <b>4</b>    | Theory4      | <b>Physiology Of Special Senses</b>                      | <ul style="list-style-type: none"> <li>- Visual Sensation.</li> <li>- Hearing Sensation.</li> <li>- Vestibular Function.</li> <li>- Taste &amp; Smell.</li> </ul>                                                                                                   | Theoretical lectures   | Quizzes<br>short essay   |
| <b>5</b>    | Theory4      | <b>Gastrointestinal Tract - Digestive System (G.I.T)</b> | <ul style="list-style-type: none"> <li>- Anatomy, Structure &amp; Function of G.I.T.</li> <li>- GIT Smooth Muscle Contractions &amp; The Enteric Nervous System.</li> <li>- Salivary Glands.</li> </ul>                                                             | Theoretical lectures   | Quizzes<br>short essay   |
| <b>6</b>    | Theory4      |                                                          | <ul style="list-style-type: none"> <li>- Stomach Function &amp; Regulation.</li> <li>- Phases of Gastric Secretion, Inhibition of Gastric Secretion.</li> <li>- Small Intestine.</li> <li>- Pancreas &amp; Gall Bladder.</li> </ul>                                 | Theoretical lectures   | Quizzes<br>short essay   |
| <b>7</b>    | Theory4      |                                                          | <ul style="list-style-type: none"> <li>- Digestion.</li> <li>- Absorption.</li> <li>- Large Intestine.</li> <li>- Liver.</li> </ul>                                                                                                                                 | Theoretical lectures   | Quizzes<br>short essay   |

|    |         |                            |                                                                                                                                                                                                                                                            |                      |                        |
|----|---------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------|
| 8  | Theory4 | <b>Endocrinology</b>       | <ul style="list-style-type: none"> <li>- Introduction Endocrine.</li> <li>- Peptide &amp; Steroid Hormone (Production, Secretion, Mechanism of Hormones Action.</li> <li>- Hypothalamic hormones.</li> <li>- Anterior Pituitary Gland Hormones.</li> </ul> | Theoretical lectures | Quizzes<br>short essay |
| 9  | Theory4 |                            | <ul style="list-style-type: none"> <li>- Posterior Pituitary Gland Hormones.</li> <li>- Growth Hormones.</li> <li>- Thyroid Gland &amp; Hormones</li> </ul>                                                                                                | Theoretical lectures | Quizzes<br>short essay |
| 10 | Theory4 |                            | <ul style="list-style-type: none"> <li>- Pancreas Part.</li> <li>- Diabetes Mellitus.</li> </ul>                                                                                                                                                           | Theoretical lectures | Quizzes<br>short essay |
| 11 | Theory4 |                            | <ul style="list-style-type: none"> <li>- Metabolic Syndrome.</li> <li>- Hypoglycemia.</li> <li>- Adrenal Gland. Medulla.</li> <li>- Adrenal Gland Cortex.</li> </ul>                                                                                       | Theoretical lectures | Quizzes<br>short essay |
| 12 | Theory4 | <b>Reproductive system</b> | <ul style="list-style-type: none"> <li>- Male Reproductive Physiology.</li> <li>- Female Reproductive Physiology.</li> <li>- Physiology Of Pregnancy</li> </ul>                                                                                            | Theoretical lectures | Quizzes<br>short essay |
| 13 | Theory4 | <b>Renal Physiology</b>    | <ul style="list-style-type: none"> <li>- Renal Circulation and Glomerular Filtration.</li> <li>- Tubular Reabsorption.</li> <li>- Tubular Secretion</li> <li>- Water Excretion By The Kidneys.</li> </ul>                                                  | Theoretical lectures | Quizzes<br>short essay |
| 14 | Theory4 |                            | <ul style="list-style-type: none"> <li>- Role of The Kidneys in Electrolytes Balance.</li> <li>- The Regulation of pH.</li> <li>- Regulation of Body Fluid Volume.</li> <li>- Renal Disease And Dieresis.</li> </ul>                                       | Theoretical lectures | Quizzes<br>short essay |
| 15 | Theory4 |                            | <ul style="list-style-type: none"> <li>- Function Test</li> <li>- Overview &amp; Discussion.</li> </ul>                                                                                                                                                    | Theoretical lectures | Quizzes<br>short essay |

### 11. Course Evaluation

1. Short exams
2. Theoretical mid-term exam
3. Theoretical final exam

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| 4. Seminars.                                                          |  |
| <b>12. Learning and Teaching Resources</b>                            |  |
| Required textbooks (curricular books, if any)                         |  |
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

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|------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                                                                       |                                                                                                                                                                                                   |
| Biochemistry                                                                                                                 |                                                                                                                                                                                                   |
| <b>2. Course Code:</b>                                                                                                       |                                                                                                                                                                                                   |
| CHMBio-21                                                                                                                    |                                                                                                                                                                                                   |
| <b>3. Semester / Year:</b>                                                                                                   |                                                                                                                                                                                                   |
| 2 <sup>nd</sup> semester / 2 <sup>nd</sup> year                                                                              |                                                                                                                                                                                                   |
| <b>4. Description Preparation Date:</b>                                                                                      |                                                                                                                                                                                                   |
| 11/5/2025                                                                                                                    |                                                                                                                                                                                                   |
| <b>5. Available Attendance Forms:</b>                                                                                        |                                                                                                                                                                                                   |
| Second stage students                                                                                                        |                                                                                                                                                                                                   |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>                                                         |                                                                                                                                                                                                   |
| 90                                                                                                                           |                                                                                                                                                                                                   |
| <b>7. Course administrator's name (mention all, if more than one name)</b>                                                   |                                                                                                                                                                                                   |
| Name: Dr. Mustafa Saleam<br>Dr. Abdullah Ali<br>Dr. Mohamed Amer<br>Dr. Ayad abod<br>Email: mustafa.saleam@uofallujah.edu.iq |                                                                                                                                                                                                   |
| <b>8. Course Objectives</b>                                                                                                  |                                                                                                                                                                                                   |
| <b>Course Objectives</b>                                                                                                     | *Introduce the importance of metabolic reactions within the cells of the human body<br>*The metabolic reactions relationship to various diseases for medical students                             |
| <b>9. Teaching and Learning Strategies</b>                                                                                   |                                                                                                                                                                                                   |
| <b>Strategy</b>                                                                                                              | Teaching Strategies include theoretical lectures, discussions, practical part and conducting experiments. Evaluation is based on the grades of the theoretical and practical exam and short exams |
| <b>10. Course Structure</b>                                                                                                  |                                                                                                                                                                                                   |

| Weeks | Hours                      | Unit name/topic                                                                                                                  | Required learning outcomes                                                                                                                              | Teaching method      | Evaluation method                  |
|-------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------|
| 1     | 3 h theory + 3 h practical | <b><u>Lipid Metabolism:</u></b><br>1. General Introduction,<br>2. Digestion And<br>3. Absorption.                                | -Definition of the basic principles of life metabolism<br>-Definition of water-soluble vitamins and their metabolism                                    | Theoretical lectures | Summative and formative assessment |
| 2     | 3 h theory + 3 h practical | 4. B-Oxidation And Fatty Acid Biosynthesis,<br>5. Triglycerides Synthesis And Degradation.<br>6. Lipoprotein Metabolism          | - Definition of fat-soluble vitamins and their metabolism<br>-Identification of important minerals in the body, their function and metabolic disorders  | Theoretical lectures | Summative and formative assessment |
| 3     | 3 h theory + 3 h practical | Phospholipid Metabolism,<br><br>Ketogenesis And Ketoacidosis.<br><br>Cholesterol Metabolism                                      | -Identify important minerals in the body, their function and metabolic disorders<br>-Identify glands and hormone composition                            | Theoretical lectures | Summative and formative assessment |
| 4     | 3h theory + 3 h practical  | Bile Acid Metabolism And Gallstones<br><br><b><u>Protein &amp; Amino Acid Metabolism:</u></b><br>General Introduction, Digestion | -Learn the details of hormones and glands in terms of classification, work and physiological function.                                                  | Theoretical lectures | Summative and formative assessment |
| 5     | 3 h theory + 3 h practical | Absorption.<br>7. Protein Synthesis And Catabolism, Amino Acid Metabolism ( Anabolism And Catabolism )                           | Knowing the classification of hormones according to the nature of their composition and functions.<br>-The role of reproductive hormones in both sexes. | Theoretical lectures | Summative and formative assessment |

|    |                              |                                                                                                                    |                                                                                                                                                                                                                                                                                                      |                      |                                    |
|----|------------------------------|--------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------------|
|    |                              |                                                                                                                    | -What are the types of hormonal disorders?                                                                                                                                                                                                                                                           |                      |                                    |
| 6  | 3 h theory<br>+3 h practical | 8. Transamination,<br>9. Deamination,<br>10. Trans-Deamination,                                                    | -Learn about the structure and function of sugars and the steps of their digestion and absorption in the body.<br><br>-Learn about the process of building and decomposing glucose and glycogen.<br><br>-Learn about the importance of sugar metabolism and the importance of the citric acid cycle. | Theoretical lectures | Summative and formative assessment |
| 7  | 3 h theory<br>+3 h practical | Central Role Of Glutamate,<br>Sources And Fate Of Ammonia<br>Catabolism Of Phenylalanine,                          | -Identify the steps of sugar oxidation and phosphorylation.<br><br>-Identify the condition of sugar metabolism disorder in the body and what diseases arise from it.<br><br>-Diabetes                                                                                                                | Theoretical lectures | Summative and formative assessment |
| 8  | 3 h theory<br>+3 h practical | 1. Tyrosine, Methionine, Cysteine, Serine, Glycine.....<br>2. Urea Cycle, Inborn Errors Of Amino Acids. Discussion | -Identify diseases and disorders and know the causes of the disorder.                                                                                                                                                                                                                                | Theoretical lectures | Summative and formative assessment |
| 9  | 3 h theory<br>+3 h practical | 1. Chemistry Of Neurotransmitters,<br>2. Porphyrins Metabolism And Porphyrin.<br>-                                 | -Identify diseases and disorders and know the causes of the disorder.                                                                                                                                                                                                                                | Theoretical lectures | Summative and formative assessment |
| 10 | 3 h theory<br>+3 h practical | <b><u>Nucleic Acid Metabolism:</u></b><br>1. Digestion And Absorption,<br>2. Nucleic Acid                          | -Identify diseases and disorders and know the causes of the disorder.                                                                                                                                                                                                                                | Theoretical lectures | Summative and formative assessment |

|    |                                    |                                                                                                                                                      |                                                                                |                         |                                             |
|----|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-------------------------|---------------------------------------------|
|    |                                    | Synthesis<br>Metabolism of Purine and<br>Pyrimidine (Synthesis And<br>Degradation)                                                                   |                                                                                |                         |                                             |
| 11 | 3 h<br>theory<br>+3 h<br>practical | Hyperuricemia And<br>Gout,<br>Clinical Enzymology<br>Clinical Enzymology                                                                             | -Identify diseases<br>and disorders and<br>know the causes of<br>the disorder. | Theoretical<br>lectures | Summative<br>and<br>formative<br>assessment |
| 12 | 3 h<br>theory<br>+3 h<br>practical | 1. Liver Function Test<br>Renal Function Test                                                                                                        | -Identify diseases<br>and disorders and<br>know the causes of<br>the disorder. | Theoretical<br>lectures | Summative<br>and<br>formative<br>assessment |
| 13 | 3 h<br>theory<br>+3 h<br>practical | <b><u>Molecular Biology</u></b><br>1. DNA & RNA<br>2. Flow Of Genetic<br>Information<br>Exploring Genes<br>( <u>Recombinant Dna<br/>Technology</u> ) | -Identify diseases<br>and disorders and<br>know the causes of<br>the disorder. | Theoretical<br>lectures | Summative<br>and<br>formative<br>assessment |
| 14 | 3 h<br>theory<br>+3 h<br>practical | 1. DNA Replication &<br>Repair<br>2. Gene Re-<br>Arrangement<br>Protein Synthesis                                                                    | -Identify diseases<br>and disorders and<br>know the causes of<br>the disorder. | Theoretical<br>lectures | Summative<br>and<br>formative<br>assessment |
| 15 | 3 h<br>theory<br>+3 h<br>practical | -Glycogen Storage<br>Disease, Lactic Acidosis<br>-Overview And<br>Discussion                                                                         | -Identify diseases<br>and disorders and<br>know the causes of<br>the disorder. | Theoretical<br>lectures | Summative<br>and<br>formative<br>assessment |

| 11.Course Evaluation                                                  |                                                                                                                                                            |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Theoretical lectures, discussion hours and practical experiments      |                                                                                                                                                            |
| 12. Learning and Teaching Resources                                   |                                                                                                                                                            |
| Required textbooks (curricular books, if any)                         | 1.Lippincott's Biochemistry                                                                                                                                |
| Main references (sources)                                             | 2.Murray RK, Bender DA, Botham KM , Kennelly PJ, Rodwell , & Anthony Weil P (2009) : Harper's Illustrated Biochemistry, by The McGraw-Hill Companies, Inc. |
| Recommended books and references<br>(scientific journals, reports...) |                                                                                                                                                            |
| Electronic References, Websites                                       |                                                                                                                                                            |

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|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                |
| Embryology                                                                 |                                                                                                                                                                                                                                                                                                                |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                |
| ANTEmb-21                                                                  |                                                                                                                                                                                                                                                                                                                |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                |
| 2 <sup>nd</sup> semester / 2 <sup>nd</sup> year                            |                                                                                                                                                                                                                                                                                                                |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                |
| Second stage students                                                      |                                                                                                                                                                                                                                                                                                                |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                |
| <b>Course Objectives</b>                                                   | Typically focus on providing a detailed understanding of the development of specific org systems and their structural and functional relationships within the embryo include:<br>1- Development of the skeletal system.<br>2- Development of the muscular system.<br>3- Development of the circulatory system. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                |
| <b>Strategy</b>                                                            | To provide foundational knowledge and theoretical understanding.<br>Methods:<br>Traditional lectures with PowerPoint presentations or whiteboard.<br>Use of multimedia tools (videos, animations) to illustrate dynamic processes fertilization, gastrulation, and organogenesis.                              |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                |

| Weeks | Hours     | Subjects                   | Teaching methods                            | Assessment       |
|-------|-----------|----------------------------|---------------------------------------------|------------------|
| 1     | 2= Theory | <b>The skeletal system</b> | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 2     | 2= Theory | <b>Pharyngeal arches</b>   | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 3     | 2= Theory | <b>The nervous system</b>  | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 4     | 2= Theory | <b>The eye</b>             | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 5     | 2= Theory | <b>The ear</b>             | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 6     | 2= Theory | <b>The heart</b>           | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 7     | 2= Theory | <b>Mid-term</b>            | lectures ,tutorials and                     | Quizzes (theory) |

|    |           |                                    |                                             |                  |
|----|-----------|------------------------------------|---------------------------------------------|------------------|
|    |           | <b>examination</b>                 | laboratory sessions                         |                  |
| 8  | 2= Theory | <b>The integumentary system</b>    | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 9  | 2= Theory | <b>The gut tube.</b>               | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 10 | 2= Theory | <b>Derivatives of the gut tube</b> | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 11 | 2= Theory | <b>The respiratory system</b>      | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 12 | 2= Theory | <b>The renal system</b>            | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 13 | 2= Theory | <b>The renal system</b>            | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 14 | 2= Theory | <b>The internal genital organs</b> | lectures ,tutorials and laboratory sessions | Quizzes (theory) |
| 15 | 2= Theory | <b>The external genital organs</b> | lectures ,tutorials and laboratory sessions | Quizzes (theory) |

|                                                                    |                                                                                                  |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| <b>11.Course Evaluation</b>                                        |                                                                                                  |
| Theoretical lectures, discussion hours and practical experiments   |                                                                                                  |
| <b>12. Learning and Teaching Resources</b>                         |                                                                                                  |
| Required textbooks (curricular books, if any)                      | <b>Sadler TW (2000): Langman's medical embryology. 1 Ed.William &amp; Wilkins. Philadelphia.</b> |
| Main references (sources)                                          | <b>LARSEN'S HUMAN EMBRYOLOGY<br/>High-Yield Embryology-Lippincott Williams &amp; Wilkin</b>      |
| Recommended books and references (scientific journals, reports...) |                                                                                                  |
| Electronic References, Websites                                    |                                                                                                  |

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|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                  |
| Anatomy                                                                    |                                                                                                                                                                                                                                                                                                  |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                  |
| ANTAnt-22                                                                  |                                                                                                                                                                                                                                                                                                  |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                  |
| 2 <sup>nd</sup> semester / 2 <sup>nd</sup> year                            |                                                                                                                                                                                                                                                                                                  |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                  |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                  |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                  |
| Second stage students                                                      |                                                                                                                                                                                                                                                                                                  |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                  |
| 135                                                                        |                                                                                                                                                                                                                                                                                                  |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                  |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                  |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                  |
| <b>Course Objectives</b>                                                   | 1- detailed knowledge about the human body's structure, including organs, tissues, and systems, and their interrelationships.<br>2- Describe the anatomy of the thoracic cage, pelvis, head and neck, and abdomen.<br>3- Direct students towards the importance of anatomy in clinical practice. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                  |
| <b>Strategy</b>                                                            | Purpose: Provide foundational knowledge and explain complex concepts.<br>Methods: Use PowerPoint presentations with diagrams, images, and animations.<br>Incorporate clinical correlations to make the material relevant.<br>Encourage interactive discussions and Q&A sessions.                 |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                  |

| Weeks | Hours                        | Outcome                       | Subjects                                         | Teaching method                         | assessment                                                       |
|-------|------------------------------|-------------------------------|--------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
| 1     | 3=theoretical<br>6=practical | Anatomy of the nervous system | Gross anatomy of the brain                       | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 2     | 3=theoretical<br>6=practical | Anatomy of the nervous system | Localization of functions in the cerebral cortex | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |

|   |                              |                               |                                                                                                                    |                                         |                                                                  |
|---|------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
| 3 | 3=theoretical<br>6=practical | Anatomy of the nervous system | Blood supplies the brain.<br>Meninges and circulation of cerebrospinal fluid and spinal cord                       | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 4 | 3=theoretical<br>6=practical | Anatomy of the nervous system | Cranial nerves                                                                                                     | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 5 | 3=theoretical<br>6=practical | Anatomy of the nervous system | Limbic system. Cerebellum.<br>Diencephalon                                                                         | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 6 | 3=theoretical<br>6=practical | Anatomy of the nervous system | Basal ganglia. Spinal cord                                                                                         | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 7 | 3=theoretical<br>6=practical | Head and neck anatomy         | Superficial anatomy, parts, and fascia of the neck. Triangles of the neck                                          | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 8 | 3=theoretical<br>6=practical | Head and neck anatomy         | Blood vessels of the neck.<br>Thyroid and parathyroid glands.<br>Neck viscera. Prevertebral and suboccipital areas | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |

|    |                              |                       |                                                                                                |                                         |                                                                  |
|----|------------------------------|-----------------------|------------------------------------------------------------------------------------------------|-----------------------------------------|------------------------------------------------------------------|
| 9  | 3=theoretical<br>6=practical | Head and neck anatomy | Neck root. Scalp and facial muscles. Nerves and blood vessels of the face                      | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 10 | 3=theoretical<br>6=practical | Head and neck anatomy | Parotid region. Infratemporal fossa: muscles, blood vessels, nerves                            | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 11 | 3=theoretical<br>6=practical | Head and neck anatomy | Pteropalatine fossa.<br>Temporomandibular joints.<br>Mouth and throat.<br>Submandibular region | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 12 | 3=theoretical<br>6=practical | Head and neck anatomy | Ear, orbit and eyeball                                                                         | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 13 | 3=theoretical<br>6=practical | Head and neck anatomy | Nose and sinuses. Pharynx                                                                      | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 14 | 3=theoretical<br>6=practical | Head and neck anatomy | Larynx. Lymphatic drainage of the head and neck.                                               | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |
| 15 | 3=theoretical<br>6=practical | Head and neck anatomy | Sectional anatomy of the head and neck                                                         | Theoretical lectures and practical labs | Theoretical and practical exams, discussion sessions and reports |

|                                                                    |                                                                                                                                                                                                                                                                          |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>11.Course Evaluation</b>                                        |                                                                                                                                                                                                                                                                          |
| Theoretical lectures, discussion hours and practical experiments   |                                                                                                                                                                                                                                                                          |
| <b>12. Learning and Teaching Resources</b>                         |                                                                                                                                                                                                                                                                          |
| Required textbooks (curricular books, if any)                      | Moore KL & Dalley AF (2006): Clinically Oriented Anatomy. 5th Ed. Lippincott Williams & Wilkins, Philadelphia                                                                                                                                                            |
| Main references (sources)                                          | - Snell RS (2011): Clinical anatomy by regions. 9 <sup>th</sup> Ed. Williams & Wilkins. Philadelphia<br>- Abrahams P: McMinn's interactive clinical anatomy (CD)<br>- Jaffar A & Al-Salihi A (2000): Selected topics in anatomy (CD). Al-Nahrain University publication. |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                                                                                                          |
| Electronic References, Websites                                    |                                                                                                                                                                                                                                                                          |

|                                                                            |                                                                                                                                                                                                                                                                                                                                    |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                    |
| Histology                                                                  |                                                                                                                                                                                                                                                                                                                                    |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                    |
| ANTHis-21                                                                  |                                                                                                                                                                                                                                                                                                                                    |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                    |
| 2 <sup>nd</sup> semester / 2 <sup>nd</sup> year                            |                                                                                                                                                                                                                                                                                                                                    |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                    |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                    |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                    |
| Second stage students                                                      |                                                                                                                                                                                                                                                                                                                                    |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                    |
| 60                                                                         |                                                                                                                                                                                                                                                                                                                                    |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                    |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                    |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                    |
| <b>Course Objectives</b>                                                   | 1.Understand the basic principles of tissue preparation and staining techniques used in histology.<br>2.Identify and differentiate between the four basic types of tissues: epithelial, connective muscular, and nervous.<br>3.Recognize the histological features of various organs and understand their functional significance. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                    |
| <b>Strategy</b>                                                            | a.Delivered in person or online, covering theoretical concepts of histology, including tissue types, organ systems, and staining techniques.                                                                                                                                                                                       |

|  |                                                                                                   |
|--|---------------------------------------------------------------------------------------------------|
|  | b.Use of visual aids such as diagrams, photomicrographs, and animations to enhance understanding. |
|--|---------------------------------------------------------------------------------------------------|

## 10. Course Structure

| Weeks | Hours                           | Subjects                                                                                          | Teaching methods                            | Assessment                     |
|-------|---------------------------------|---------------------------------------------------------------------------------------------------|---------------------------------------------|--------------------------------|
| 1     | 2=<br>Theory<br>2=<br>Practical | Digestive Tract                                                                                   | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 2     | 2=<br>Theory<br>2=<br>Practical | Stomach and Small intestine.<br>Large intestine & appendix                                        | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 3     | 2=<br>Theory<br>2=<br>Practical | Organs associated with the digestive tract; . Pancreas.<br>Liver, gall bladder and biliary tract. | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 4     | 2=<br>Theory<br>2=<br>Practical | Respiratory System                                                                                | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 5     | 2=<br>Theory<br>2=<br>Practical | The Lung.                                                                                         | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 6     | 2=<br>Theory<br>2=<br>Practical | Urinary System I                                                                                  | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 7     | 2=<br>Theory<br>2=<br>Practical | Urinary system II.                                                                                | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 8     | 2=<br>Theory<br>2=<br>Practical | Mid-term Examination (Theory).<br>Endocrine glands ; Pituitary gland.                             | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |
| 9     | 2=<br>Theory<br>2=<br>Practical | Suprarenal glands, thyroid, and parathyroid glands.<br>Pineal , Endocrine , Pancreases glands.    | lectures ,tutorials and laboratory sessions | Quizzes (theory and practical) |

|    |                                  |                                                                                                                      |                                                |                                   |
|----|----------------------------------|----------------------------------------------------------------------------------------------------------------------|------------------------------------------------|-----------------------------------|
| 10 | 2=<br>Theory<br>2=<br>Practical  | The Male Reproductive System.<br>Prostate & Urethra.                                                                 | lectures ,tutorials and<br>laboratory sessions | Quizzes (theory and<br>practical) |
| 11 | 2=<br>Theory<br>2=<br>Practical  | The Male Reproductive System;<br>Accessory genital glands.<br>-The Female Reproductive<br>System; Ovaries & oviducts | lectures ,tutorials and<br>laboratory sessions | Quizzes (theory and<br>practical) |
| 12 | 2=<br>Theory<br>2=<br>Practical  | Uterine stages & vagina.                                                                                             | lectures ,tutorials and<br>laboratory sessions | Quizzes (theory and<br>practical) |
| 13 | 2=<br>Theory<br>2=<br>Practical  | Mammary glands.<br>Organs of Special Senses; Eye I.                                                                  | lectures ,tutorials and<br>laboratory sessions | Quizzes (theory and<br>practical) |
| 14 | 2=<br>Theory<br>2=<br>Practical  | Organs of Special Senses; Ear II.                                                                                    | lectures ,tutorials and<br>laboratory sessions | Quizzes (theory and<br>practical) |
| 15 | 2 =<br>Theory<br>2=<br>Practical | Overview.                                                                                                            | lectures ,tutorials and<br>laboratory sessions | Quizzes (theory and<br>practical) |

| 11.Course Evaluation                                                  |                                     |
|-----------------------------------------------------------------------|-------------------------------------|
| Theoretical lectures, discussion hours and practical experiments      |                                     |
| 12. Learning and Teaching Resources                                   |                                     |
| Required textbooks (curricular books, if any)                         | Lectures BASIC HISTOLOGY (11th. ed) |
| Main references (sources)                                             | Lab microscopic teaching talks      |
| Recommended books and references<br>(scientific journals, reports...) |                                     |
| Electronic References, Websites                                       |                                     |

|                                                                     |                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                              |
| Computer Science                                                    |                                                                                                                                                                                                                                                                                                              |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                              |
|                                                                     |                                                                                                                                                                                                                                                                                                              |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                              |
| 2 <sup>nd</sup> semester / 2 <sup>nd</sup> year                     |                                                                                                                                                                                                                                                                                                              |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                              |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                              |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                              |
| Second stage students                                               |                                                                                                                                                                                                                                                                                                              |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                              |
| 45                                                                  |                                                                                                                                                                                                                                                                                                              |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                              |
| Name:                                                               |                                                                                                                                                                                                                                                                                                              |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                              |
| <b>Course Objectives</b>                                            | <ul style="list-style-type: none"> <li>•Utilize the computer for fundamental tasks.</li> <li>•Identify and discuss the hardware components of the computer system.</li> <li>•Creating documents using a word processor and creating presentations.</li> <li>•Conducting research on the internet.</li> </ul> |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                              |
| <b>Strategy</b>                                                     | 1-Theoretical Lectures<br>2- Practical Labs                                                                                                                                                                                                                                                                  |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                                                                              |

| Week | Hours | Unit name/topic                              | Required learning outcomes                                                                  | Teaching Method                                                                                                                                                                                                                                                                                  | Assessment Method                                                                                                                                   |
|------|-------|----------------------------------------------|---------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 1     | The Role of AI in Modern Smartphones         | AI-Driven Mobile Technologies, Virtual Assistants (Siri, Google Assistant, Alexa).          | <b>1-Theoretical Lectures</b><br><br><b>2-Practical Labs</b><br><br><b>The course will use the following teaching and learning methods:</b> <ul style="list-style-type: none"> <li>• Board (Normal or Smart)</li> <li>• Computers</li> <li>• Presentation software such as PowerPoint</li> </ul> | <ul style="list-style-type: none"> <li>• MCQ</li> <li>• Essay questions</li> <li>• Assessment of the experimental application on the Lab</li> </ul> |
| 2    | 1     | The Role of AI in Modern Smartphones (Cont.) | Adaptive Learning, Real-Time Translation Services.                                          |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 3    | 1     | The Role of AI in Modern Smartphones (Cont.) | The Future of AI in Smartphone Technology, Challenges of implementing AI in Mobile Devices. |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 4    | 1     | Applications and Tools of AI                 | Overview of AI Applications in Various industries, Education and Healthcare.                |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 5    | 1     | Applications and Tools of AI (Cont.)         | Transportation and Advertising.                                                             |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 6    | 1     | Applications and Tools of AI (Cont.)         | Finance, Robotics and Automation Technologies.                                              |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 7    | 1     | Applications and Tools of AI (Cont.)         | AI in Marketing: Targeting and Personalization.                                             |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 8    | 1     | Applications and Tools of AI (Cont.)         | AI in image and Video Analysis, Smart Cities                                                |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 9    | 1     | Applications and Tools of AI (Cont.)         | Future Trends in AI Applications and Tools.                                                 |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 10   | 1     | AI and Society                               | Introduction to AI and Its Societal Impact, The Role of AI in Enhancing Public Safety.      |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 11   | 1     | AI and Society (Cont.)                       | Cultural Perspectives on AI Adoption, AI and Governance: Policy implications.               |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |
| 12   | 1     | Ethical Challenges                           | Introduction to                                                                             |                                                                                                                                                                                                                                                                                                  |                                                                                                                                                     |

|    |   |                                  |                                                                                                  |                                                                                                                                                                                                                                                                                       |                                                                                                                                                 |
|----|---|----------------------------------|--------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
|    |   | in AI                            | Ethics in AI, Transparency and Explain ability of AI Systems, Privacy Concerns in AI Data Usage. |                                                                                                                                                                                                                                                                                       |                                                                                                                                                 |
| 13 | 1 | Ethical Challenges in AI (Cont.) | The Ethical Implications of Autonomous Systems, Ethics in AI-Driven Marketing and Advertising.   | <b>1-Theoretical Lectures</b><br><br><b>2-Practical Labs</b><br><br><b>The course will use the following teaching and learning methods:</b> <ul style="list-style-type: none"> <li>• Board (Normal or Smart)</li> <li>• Computers Presentation software such as PowerPoint</li> </ul> | <ul style="list-style-type: none"> <li>• MCQ</li> <li>• Essay questions</li> </ul> <p>Assessment of the experimental application on the Lab</p> |
| 14 | 1 | Ethical Challenges in AI (Cont.) | Ethical Considerations in Education, Human Rights and AI Implementation.                         |                                                                                                                                                                                                                                                                                       |                                                                                                                                                 |
| 15 | 1 | The Future of AI                 | Future trends in AI, recent research and emerging technologies.                                  |                                                                                                                                                                                                                                                                                       |                                                                                                                                                 |

| 11.Course Evaluation                                               |  |
|--------------------------------------------------------------------|--|
| Theoretical lectures, discussion hours and practical experiments   |  |
| 12. Learning and Teaching Resources                                |  |
| Required textbooks (curricular books, if any)                      |  |
| Main references (sources)                                          |  |
| Recommended books and references (scientific journals, reports...) |  |
| Electronic References, Websites                                    |  |

### 3<sup>rd</sup> year / First semester

## Course Description Form

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Surgery                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Sur-11                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 1 <sup>st</sup> semester / 3 <sup>rd</sup> year                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 3 <sup>rd</sup> stage students                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 15                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Name:                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Course Objectives</b>                                            | The course describes the basic knowledges of surgical principles to the medical student build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the emergent conditions, in a way to participate in optimizing the medical services to the society                                                                                                                                                           |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Strategy</b>                                                     | This course is given as one lecture per week for 1 hour each. The lectures are interactive and composed of PowerPoint presentations, images, and videos to illustrate concepts and procedures. Case-based learning with pre- and post-questions. Online resources such as online meetings, social media groups and e-books can supplement traditional lectures and provide additional opportunities for learning as well as various student tasks to implement self-directed learning. |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Week | hours | Unit name/topic                 | Required learning outcomes                                                                                                    | Teaching Method | Assessment Method |
|------|-------|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|
| 1    | 1     | <b>Introduction and history</b> | Read of scope of modern surgery, outline development milestones of surgery and development of aseptic and anti-septic surgery |                 |                   |

|   |   |                                      |                                                                                                                                                                                                                                                                                              |  |  |
|---|---|--------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 2 | 1 | <b>Wound and repair</b>              | <p>I. Wound: definitions, types, classifications, clinical features and management.</p> <p>II. Scars: definitions, types,</p> <p>Tissue repair: definitions, pathophysiology of wound and factors affect wound healing.</p>                                                                  |  |  |
| 3 | 1 | <b>Wound Infections</b>              | <p>I. Explain the pathophysiology of wound infections and the host immune response.</p> <p>II. Recognize the types of wound infections (abscess, cellulitis, etc.) and their clinical manifestations.</p> <p>Outline appropriate management strategies for each type of wound infection.</p> |  |  |
| 4 | 1 | <b>Specific Infections</b>           | <p>I. Describe the key infections encountered in surgical practice (e.g., tetanus, gas gangrene).</p> <p>II. Discuss each infection's pathophysiology, clinical features, and diagnostic approaches.</p> <p>Identify treatment protocols and preventive measures for each infection.</p>     |  |  |
| 5 | 1 | <b>Fluid and Electrolyte Balance</b> | <p>I. Recall the distribution of body fluids and principles of volume regulation.</p> <p>Recognize causes, clinical signs, and treatment approaches for electrolyte imbalances.</p>                                                                                                          |  |  |
| 6 | 1 | <b>Acid–Base Balance</b>             | <p>I. Define acid-base balance and buffering systems.</p> <p>II. Differentiate between</p>                                                                                                                                                                                                   |  |  |

|    |   |                                          |                                                                                                                                                                                                                                                                              |  |  |
|----|---|------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|    |   |                                          | acidosis and alkalosis and their clinical effects. Identify various acid-base disorders and explain their management, including the concept of the anion gap.                                                                                                                |  |  |
| 7  | 1 | <b>Surgical Nutrition and Metabolism</b> | <p>I. List the components of adequate nutrition for surgical patients.</p> <p>II. Understand the indications, types, and potential complications of enteral and parenteral nutrition. Assess the nutritional status of surgical patients and identify nutritional needs.</p> |  |  |
| 8  | 1 | <b>Shock</b>                             | Classifications and grading of shock. Causes and clinical features of every type of shock outline management and monitoring procedures and methods of resuscitation.                                                                                                         |  |  |
| 9  | 1 | <b>Hemorrhage and blood transfusion</b>  | List different type of hemorrhage, signs and symptoms of blood loss, assessment and management of degree of acute bleeding. Outline the indication of blood transfusion, various types of blood and blood products and their transfusion complications                       |  |  |
| 10 | 1 | <b>Tumors</b>                            | <p>I. Define tumors, explain their classifications, and distinguish between benign and malignant types.</p> <p>II. Understand the principles of tumor grading, staging,</p>                                                                                                  |  |  |

|    |   |                                                                             |                                                                                                                                                                                                                                                                                |  |  |
|----|---|-----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|    |   |                                                                             | and pathways of metastasis.<br>Outline diagnostic, screening, and treatment methods for tumors.                                                                                                                                                                                |  |  |
| 11 | 1 | <b>Ulcers, Sinuses, and Fistulae</b>                                        | I. Define ulcers, sinuses, and fistulae and describe their clinical features and classification.<br>Explain the diagnostic approaches and management options for each condition.                                                                                               |  |  |
| 12 | 1 | <b>Diabetic Foot and Gangrene</b>                                           | I. Identify risk factors, pathophysiology, and clinical features of diabetic foot and gangrene.<br>Describe the diagnostic methods, classification, and management strategies for these conditions.                                                                            |  |  |
| 13 | 1 | <b>Diseases of the Lymphatic System</b>                                     | Describe common diseases of the lymphatic system, including clinical features, diagnostic tools, and treatment.                                                                                                                                                                |  |  |
| 14 | 1 | <b>Burns, Skin Grafts, and Implants</b><br><br><b>Skin Tumors and Cysts</b> | I. Classify burn types and explain their treatment.<br>II. Understand the indications, techniques, and complications of skin grafts and implants.<br><br>Define common skin tumors and cysts, recognize clinical presentations, and describe diagnostic and treatment options. |  |  |
| 15 | 1 | <b>Principles of Organ Transplantation</b>                                  | Outline the basic principles, indications, and considerations in organ transplantation                                                                                                                                                                                         |  |  |

|                                                                    |                                                                                                                                                        |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>11.Course Evaluation</b>                                        |                                                                                                                                                        |
| Theoretical lectures, discussion hours and practical experiments   |                                                                                                                                                        |
| <b>12. Learning and Teaching Resources</b>                         |                                                                                                                                                        |
| Required textbooks (curricular books, if any)                      | •Bailey & Love's Short Practice of Surgery (Essential reference for surgical principles and procedures).                                               |
| Main references (sources)                                          | Lecture slides, case studies, clinical guidelines, and video demonstrations.<br>Online resources, including e-books and interactive medical platforms. |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                        |
| Electronic References, Websites                                    |                                                                                                                                                        |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                               |
| Internal Medicine                                                          |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                               |
| Med-10                                                                     |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                               |
| 1 <sup>st</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                               |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                               |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                               |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                               |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Course Objectives</b>                                                   | By the end of the rotation, students should be able to:<br>1. Conduct a thorough patient evaluation, including history-taking.<br>2. Formulate differential diagnoses and develop initial diagnostic and treatment plans.<br>3. Interpret common laboratory and imaging tests, including interpretation of ABG, Electrolyte disorders, & general approach to common clinical manifestations . |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Strategy</b>                                                            | Lectures guided by proper PPT presentation & wards.                                                                                                                                                                                                                                                                                                                                           |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                               |

| Week | Hours | Unit/Module or Topic Title | Teaching Method | Assessment Method |
|------|-------|----------------------------|-----------------|-------------------|
|------|-------|----------------------------|-----------------|-------------------|

|    |         |                                                        |                                           |                               |
|----|---------|--------------------------------------------------------|-------------------------------------------|-------------------------------|
| 1  | 2 hours | 1. Introduction to Medicine.<br>2. Chest Pain          | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 2  | 2 hours | 3. Nutrition.<br>4. Obesity & Undernutrition.          | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 3  | 2 hours | 5. Palpitation.<br>6. Oedema.                          | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 4  | 2 hours | 7. Vitamin Deficiency.<br>8. Mineral Deficiency.       | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 5  | 2 hours | 9. Shortness of breath.<br>10. Cough.                  | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 6  | 2 hours | 11. Acid Base Balance.<br>12. Acid Base Disorders.     | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 7  | 2 hours | 13. Cyanosis.<br>14. Haemoptysis.                      | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 8  | 2 hours | Midterm Exam                                           | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 9  | 2 hours | 15. Electrolyte disorders<br>16. Electrolyte disorders | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 10 | 2 hours | 17. Abdominal pain<br>18. Diarrhoea.                   | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |
| 11 | 2 hours | 19. Lipid disorders<br>20. Lipid Disorders.            | Lecture presentation<br>Homework<br>cases | Assay questions<br>MCQ<br>EMQ |

|    |         |                                                                |                                              |                                  |
|----|---------|----------------------------------------------------------------|----------------------------------------------|----------------------------------|
| 12 | 2 hours | 21. Constipation<br>22. Jaundice-1                             | Lecture<br>presentation<br>Homework<br>cases | Assay<br>questions<br>MCQ<br>EMQ |
| 13 | 2 hours | 23. Jaundice-2<br>24. Hematemesis.                             | Lecture<br>presentation<br>Homework<br>cases | Assay<br>questions<br>MCQ<br>EMQ |
| 14 | 2 hours | 25. Case Based<br>Discussion.<br>26. Case Based<br>Discussion. | Lecture<br>presentation<br>Homework<br>cases | Assay<br>questions<br>MCQ<br>EMQ |
| 15 | 2 hours | 27. Review.<br>28. Review.                                     | Lecture<br>presentation<br>Homework<br>cases | Assay<br>questions<br>MCQ<br>EMQ |

### 11. Course Evaluation

Theoretical lectures and exams

### 12. Learning and Teaching Resources

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| Required textbooks (curricular books, if any)                         |  |
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                            |                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                             |
| Clinical training                                                          |                                                                                                                                                                                                                                                                                                                                             |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                             |
| Med-11                                                                     |                                                                                                                                                                                                                                                                                                                                             |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                             |
| 1 <sup>st</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                             |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                             |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                             |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                             |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                             |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                             |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                             |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                             |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                             |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                             |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>• Learn systematic and comprehensive history-taking techniques</li> <li>• Develop effective communication and active listening skills</li> <li>• Understand how to ask relevant questions based on patient complaints</li> <li>• Identify red flags and prioritize differential diagnoses</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                             |
| <b>Strategy</b>                                                            | Taking with patients and their relatives                                                                                                                                                                                                                                                                                                    |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                             |

| Wee<br>k        | Hour<br>s | Unit/Module or Topic Title                                                                                                                                                                                                                       | Teaching<br>Method     | Assessm<br>ent<br>Method |
|-----------------|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------|
| 1 <sup>st</sup> | 2         | <b>Patient Identification (Demographics)</b> <ul style="list-style-type: none"> <li>• Name</li> <li>• Age</li> <li>• Gender</li> <li>• Occupation</li> <li>• Marital status</li> <li>• Address &amp; Contact Information</li> </ul>              | Real Patient interview | Case Discussion          |
| 2 <sup>nd</sup> | 2         | <b>Chief Complaint (CC)</b> <ul style="list-style-type: none"> <li>• The <b>main reason</b> the patient is seeking medical attention.</li> <li>• Recorded in the <b>patient's own words</b> (e.g., "I have chest pain for two days").</li> </ul> | Real Patient interview | Case Discussion          |

|                  |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                        |                 |
|------------------|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|-----------------|
| 3 <sup>rd</sup>  | 2 | <b>History of Present Illness (HPI)</b> <ul style="list-style-type: none"> <li>A <b>detailed exploration</b> of the chief complaint using <b>SOCRATES or OPQRST</b> for symptom analysis.</li> </ul>                                                                                                                                                                                                                                             | Real Patient interview | Case Discussion |
| 4 <sup>th</sup>  | 2 | Review of Different clinical scenario                                                                                                                                                                                                                                                                                                                                                                                                            | Real Patient interview | Case Discussion |
| 5 <sup>th</sup>  | 2 | Review of Different clinical scenario                                                                                                                                                                                                                                                                                                                                                                                                            | Real Patient interview | Case Discussion |
| 6 <sup>th</sup>  | 2 | <b>Past Medical History (PMH)</b> <ul style="list-style-type: none"> <li><b>Chronic illnesses</b> (e.g., diabetes, hypertension, asthma)</li> <li><b>Previous hospitalizations and surgeries</b></li> <li><b>Infectious diseases</b> (e.g., tuberculosis, hepatitis)</li> <li><b>Allergies</b> (drug, food, environmental)</li> <li><b>Immunization status</b></li> <li><b>Medications currently taking</b> (prescribed, OTC, herbal)</li> </ul> | Real Patient interview | Case Discussion |
| 7 <sup>th</sup>  | 2 | <b>Family History (FH)</b> <ul style="list-style-type: none"> <li><b>Hereditary conditions</b> (e.g., hypertension, diabetes, cancer)</li> <li>Any <b>early deaths</b> in the family</li> <li>Conditions affecting <b>first-degree relatives</b> (parents, siblings)</li> </ul>                                                                                                                                                                  | Real Patient interview | Case Discussion |
| 8 <sup>th</sup>  | 2 | <b>Social History (SH)</b> <ul style="list-style-type: none"> <li><b>Smoking history</b> (pack-years = packs/day × years)</li> <li><b>Alcohol use</b> (type, frequency, quantity)</li> <li><b>Illicit drug use</b></li> <li><b>Diet and exercise habits</b></li> <li><b>Occupational exposure to hazards</b></li> <li><b>Living conditions &amp; support system</b></li> </ul>                                                                   | Real Patient interview | Case Discussion |
| 9 <sup>th</sup>  | 2 | <b>Review of Systems (ROS)</b><br><br>A <b>systematic screening</b> for symptoms affecting different body systems.                                                                                                                                                                                                                                                                                                                               | Real Patient interview | Case Discussion |
| 10 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>Practicing history-taking on real patients.</li> </ul>                                                                                                                                                                                                                                                                                                                                                    | Real Patient interview | Case Discussion |
| 11 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>Practicing history-taking on real patients</li> </ul>                                                                                                                                                                                                                                                                                                                                                     | Real Patient interview | Case Discussion |

|                  |   |                                                                                               |                        |                 |
|------------------|---|-----------------------------------------------------------------------------------------------|------------------------|-----------------|
| 12 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>Practicing history-taking on real patients.</li> </ul> | Real Patient interview | Case Discussion |
| 13 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>Practicing history-taking on real patients.</li> </ul> | Real Patient interview | Case Discussion |
| 14 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>Practicing history-taking on real patients.</li> </ul> | Real Patient interview | Case Discussion |
| 15 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>Practicing history-taking on real patients.</li> </ul> | Real Patient interview | Case Discussion |

| 11.Course Evaluation                                               |                                |
|--------------------------------------------------------------------|--------------------------------|
| Case study                                                         |                                |
| 12. Learning and Teaching Resources                                |                                |
| Required textbooks (curricular books, if any)                      | Macleod's clinical examination |
| Main references (sources)                                          | workshop                       |
| Recommended books and references (scientific journals, reports...) |                                |
| Electronic References, Websites                                    |                                |

|                                                                            |                                                                                                                                                                                                                                                                                     |
|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                     |
| Pathology                                                                  |                                                                                                                                                                                                                                                                                     |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                     |
| PATpat-31                                                                  |                                                                                                                                                                                                                                                                                     |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                     |
| 1 <sup>st</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                     |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                     |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                     |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                     |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                     |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                     |
| 120                                                                        |                                                                                                                                                                                                                                                                                     |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                     |
| Name:                                                                      |                                                                                                                                                                                                                                                                                     |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                     |
| <b>Course Objectives</b>                                                   | Develop the student's knowledge, skill, and attitude related to pathogenesis, morphology (microscopic and macroscopic pictures) and clinical manifestations of basic pathological processes and specific diseases at the molecular, cellular, tissue, organs, and whole body level. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                     |
| <b>Strategy</b>                                                            | 1. Illustrate microscopic data of different pathological lesions.<br>2-Differentiate between different diagnoses to arrive at a preferred or definite diagnosis                                                                                                                     |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                     |

| Week | Hours                                          | Required learning outcomes | Unit name/topic | Teaching method                                                                          | Evaluation method                                                                                                          |
|------|------------------------------------------------|----------------------------|-----------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------|
| 1    | 4 hours theoretical + 4 hours practical weekly | Introduction to pathology. | Pathology       | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on |

|    |                       |                                                                             |    |    |                               |
|----|-----------------------|-----------------------------------------------------------------------------|----|----|-------------------------------|
|    |                       |                                                                             |    |    | the results<br>of the<br>work |
| 2  | 4hr. + ξ hr<br>labs   | Cell injury,<br>cellular<br>adaptation<br>and cell<br>death                 | // | // | //                            |
| ۳  | ξ hr.+<br>ξ labs      | Acute<br>& chronic<br>inflammatio<br>n                                      | // | // | //                            |
| ξ  | ξ hr.+ ξ hr.<br>labs  | Tissue<br>renewal &<br>repair,<br>regeneratio<br>n, healing &<br>fibrosis   | // | // | //                            |
| 5  | ξ hr.+ ξ h<br>r. labs | Hemodyna<br>mic<br>disorders,<br>thromboem<br>bolism<br>diseases &<br>shock | // | // | //                            |
| 6  | ξ hr.+<br>ξ hr. labs  | Genetic<br>disorders                                                        | // | // | //                            |
| 7  | ξ hr +<br>ξ hr.labs   | Diseases of<br>immunity                                                     | // | // | //                            |
| 8  | ξ hr. +<br>4hr.labs   | Neoplasia                                                                   | // | // | //                            |
| 9  | ξ hr +<br>4hr labs    | Infectious<br>diseases                                                      | // | // | //                            |
| 10 | 4hr + ξ hr.<br>labs   | Environment<br>al<br>& Nutritional<br>pathology                             | // | // | //                            |
| 11 | 4hr.+<br>ξ hr.labs    | Diseases of<br>infancy &<br>childhood                                       | // | // | //                            |
| 12 | ξ hr. + ξ<br>hr. labs | Cardiovascular<br>system                                                    | // | // | //                            |

|           |                   |                                                   |    |    |    |
|-----------|-------------------|---------------------------------------------------|----|----|----|
| ١٤+١٣     | ٨hr.+<br>٨hr.labs | <b>Hematopoietic<br/>and Lymphoid<br/>Systems</b> | // | // | // |
| <b>1٥</b> | 4hr +<br>٤hr.labs | <b>Respiratory<br/>system</b>                     | // | // | // |
|           |                   |                                                   |    |    |    |

| 11.Course Evaluation                                                                                                                                                                                                                                                                |                                     |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------|
| Midterm and final exams. <ul style="list-style-type: none"> <li>• Quizzes during lectures and laboratory sessions.</li> <li>• Short-answer questions during lectures.</li> <li>• Group discussions.</li> <li>• Practical exams and lab experiments.</li> <li>• Seminars.</li> </ul> |                                     |
| 12. Learning and Teaching Resources                                                                                                                                                                                                                                                 |                                     |
| Required textbooks (curricular books, if any)                                                                                                                                                                                                                                       | M1. Robbins basic pathology 10th ed |
| Main references (sources)                                                                                                                                                                                                                                                           | Text book of pathology By Muir's    |
| Recommended books and references<br>(scientific journals, reports...)                                                                                                                                                                                                               |                                     |
| Electronic References, Websites                                                                                                                                                                                                                                                     |                                     |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Pharmacology                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Phar-5                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1 <sup>st</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 75                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Course Objectives</b>                                                   | -To introduce students to the core principles of drug action in terms of bioavailability, pharmacokinetics, pharmacodynamics and mechanism of action of drugs in the treatment of diseases.<br>-To introduce students to critically assess drug efficacy, side effects, toxicities, drug interactions and special emphasis on dosage concerns in special populations such as the young, pregnant women and in the elderly. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Strategy</b>                                                            | Use modern teaching aids such as PowerPoint presentations, animations, and whiteboards for clarification.<br>Practical applications of laboratory diagnostics.                                                                                                                                                                                                                                                             |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Week | Hours                                          | Required learning outcomes                                                                            | Lecturer name/Unit name/topic | Teaching method                                                                                             | Evaluation method                                                                                                                      |
|------|------------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 3 hours theoretical + 2 hours practical weekly | <b>- Introduction to pharmacology.</b><br><b>- Pharmacokinetic.</b><br><b>- Pharmacodynamics</b>      | Pharmacology/                 | Theoretical lectures using projectors and smart board + practical experiments and skills, PPT presentation. | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results |
| 2    |                                                | <b>- Introduction to Autonomic N.S.</b><br><b>- Autonomic N.S.</b><br><b>- cholinergic agonists I</b> |                               |                                                                                                             |                                                                                                                                        |
| 3    |                                                | <b>-Cholinergic agonists</b><br><b>-Cholinergic antagonists</b><br><b>- Adrenergic</b>                |                               |                                                                                                             |                                                                                                                                        |

|    |  |                                                                                                                                                       |                  |  |                                                                                      |
|----|--|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------|--|--------------------------------------------------------------------------------------|
|    |  | <b>agonists</b>                                                                                                                                       |                  |  | of the<br>work.<br>+<br>- Short<br>exams.<br>-Half<br>course.<br>- End of<br>course. |
| 4  |  | -Adrenergic antagonists<br>- muscle relaxants<br>- anti-hypertensive drugs I + Beta blockers.                                                         |                  |  |                                                                                      |
| 5  |  | -antihypertensive drugs II.<br>-drugs for cardiac arrhythmia I.<br>-drugs for cardiac arrhythmia II.                                                  |                  |  |                                                                                      |
| 6  |  | - Drugs for cardiac failure I.<br>-Drugs for cardiac failure II.<br>-drugs for Ischemic Heart disease.                                                |                  |  |                                                                                      |
| 7  |  | -Diuretic Drugs I.<br>-Diuretic Drugs II.<br>- Anti-hyperlipidemia drugs.                                                                             |                  |  |                                                                                      |
| 8  |  | -Histamine and antihistamines I.<br>-Histamine and antihistamine II.<br>- serotonin and anti-serotonin.                                               |                  |  |                                                                                      |
| 9  |  | <b>Mid. Exam.</b>                                                                                                                                     | <b>Mid. exam</b> |  |                                                                                      |
| 10 |  | -Adreno-corticosteroids (corticosteroids and antagonists).<br>- parathyroid hormones and drugs affecting calcium balance.<br>- dugs acting on uterus. |                  |  |                                                                                      |
| 11 |  | - Drugs treatment for infertility and erectile dysfunction.<br>- anti- epileptics.<br>- anti-Parkinson's drugs.                                       |                  |  |                                                                                      |
| 12 |  | - Antipsychotics.<br>- Local anesthetics.<br>- general anesthetics.                                                                                   |                  |  |                                                                                      |

|    |  |                                                                                                                                                                                                        |  |  |  |
|----|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| 13 |  | <b>-GIT: anti-muscarinic drugs and drugs acting on intestinal motility.</b><br><b>-anti emetics drugs regulating appetite, drugs.</b><br><b>-drugs regulating stomach secretion, antiulcer drugs.</b>  |  |  |  |
| 14 |  | <b>-drugs acting on respiratory system.</b><br><b>- mast cell stabilizer / anti IGE antibodies.</b><br><b>-respiratory stimulants.</b><br><b>- pulmonary surfactant, expectorant. - miscellaneous.</b> |  |  |  |
| 15 |  | <b>- drugs for anemia.</b><br><b>- anti- platelets, thrombolytic &amp; anticoagulant drugs.</b><br><b>- Drugs used in obesity and osteoporosis..</b>                                                   |  |  |  |

## 11.Course Evaluation

Midterm and final exams.

- Quizzes during lectures and laboratory sessions.
- Short-answer questions during lectures.
- Group discussions.
- Practical exams and lab experiments.
- Seminars.

## 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                     |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | M1. Robbins basic pathology 10th ed Whalen Pharmacology (Lippincott® Illustrated Review Pharmacology), 7th ed. (2019). Lippincott's B Pharmacology. |
| Main references (sources)                                          | Bertram G. Katzung, Todd W., Basic & Clin Pharmacology, 15th ed. (2020).                                                                            |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                     |
| Electronic References, Websites                                    |                                                                                                                                                     |

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|----------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                               |
| Immunity                                                                   |                                                                                                                                                                                                                                                                                                                               |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                               |
| Immun.-13                                                                  |                                                                                                                                                                                                                                                                                                                               |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                               |
| 1 <sup>st</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                               |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                               |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                               |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                               |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                               |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                               |
| 60                                                                         |                                                                                                                                                                                                                                                                                                                               |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                               |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                               |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                               |
| <b>Course Objectives</b>                                                   | <p>This course provides a detailed description of the immune system, its cells and components, as well as the types of immunity</p> <p>In addition to theoretical and practical laboratory information, the department is keen to provide students with laboratory techniques related to immunology and related diseases.</p> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                               |
| <b>Strategy</b>                                                            | <p>1.Delivering theoretical lectures using available presentation techniques (data show projectors and smart board).</p> <p>2.Learning the correct scientific methods for collecting clinical samples, conducting practical experiments, and learning laboratory skills to cover the practical side of subject..</p>          |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                               |

| Week          | Hours                                          | Required learning outcomes     | Unit name/topic | Teaching method                                                                          | Evaluation method                                                                                                                                  |
|---------------|------------------------------------------------|--------------------------------|-----------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>First</b>  | 2 hours theoretical + 2 hours practical weekly | Introduction to immune system. | Immunology      | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work |
| <b>Second</b> | //                                             | Antigen                        | //              | //                                                                                       | //                                                                                                                                                 |
| <b>Third</b>  | //                                             | B cell development             | //              | //                                                                                       | //                                                                                                                                                 |

|                   |           |                                                                   |           |           |           |
|-------------------|-----------|-------------------------------------------------------------------|-----------|-----------|-----------|
| Fourth            | //        | T cell development                                                | //        | //        | //        |
| <b>Fifth</b>      | <b>//</b> | <b>complement cascades and regulation of complement function.</b> | <b>//</b> | <b>//</b> | <b>//</b> |
| <b>Sixth</b>      | //        | Major histocompatibility complex (MHC)                            | //        | //        | //        |
| <b>Seventh</b>    | //        | Cytokines and inflammation                                        | //        | //        | //        |
| Eighth            | //        | Cytokines and inflammation                                        | //        | //        | //        |
| Ninth             | //        | Infection and immunity                                            | //        | //        | //        |
| Tenth             | //        | Tumor immunology                                                  | //        | //        | //        |
| <b>Eleventh</b>   | <b>//</b> | <b>Hypersensitivity types</b>                                     | <b>//</b> | <b>//</b> | <b>//</b> |
| <b>Twelfth</b>    | //        | Autoimmunity, Inherited Immune Deficiencies and Acquired Immune   | //        | //        | //        |
| <b>Thirteenth</b> | //        | Transplantation                                                   | //        | //        | //        |
| <b>Fourteenth</b> | //        | Vaccines. Immunotherapy                                           | //        | //        | //        |

### 11.Course Evaluation

1. Theoretical exams (mid-year + end of year).
2. Practical exam: (oral exam, skill exam, practical information exam).
3. Reports.
4. Seminars by students.

### 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                                                                                                  |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Jawetz, Melnick & Adelberg's ; Medical Microbiology.                                                                                                                                                                                             |
| Main references (sources)                                          | <ul style="list-style-type: none"> <li>• Cruse JM &amp; Lewis O.E. Atlas of Immunology CRC Press and Springer.</li> <li>• Clinical Immunology and Serology</li> <li>• Microbiology: An Introduction. Brock Biology of Microorganisms.</li> </ul> |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                                                                                  |
| Electronic References, Websites                                    |                                                                                                                                                                                                                                                  |

|                                                                            |                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                        |
| Bacteriology                                                               |                                                                                                                                                                                                                                                                                                                        |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                        |
| Bacter.-11                                                                 |                                                                                                                                                                                                                                                                                                                        |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                        |
| 1 <sup>st</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                        |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                        |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                        |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                        |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                        |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                        |
| 60                                                                         |                                                                                                                                                                                                                                                                                                                        |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                        |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                        |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                        |
| <b>Course Objectives</b>                                                   | <p><b>Identify the characteristics of cultivable microorganisms and pathogenic microorganisms of medical importance.</b></p> <p><b>Explain the essential methods of sterilization and infection control.</b></p> <p><b>Learn about the techniques used in immunological, molecular, and bacterial diagnostics.</b></p> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                        |
| <b>Strategy</b>                                                            | <ul style="list-style-type: none"> <li>•Use modern teaching aids such as PowerPoint presentations, animations, and whiteboards for clarification.</li> <li>•Practical applications of laboratory diagnostics.</li> </ul>                                                                                               |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                        |

| Week | Hours                                          | Required learning outcomes                                              | Unit name/topic | Teaching method                                                                          | Evaluation method                                                                                                                                  |
|------|------------------------------------------------|-------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 2 hours theoretical + 2 hours practical weekly | Bacterial cell & classification, Growth requirements and culture media. | bacteriology    | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work |
| 2    |                                                | Sterilization, Disinfections & Antimicrobial agents                     | bacteriology    |                                                                                          |                                                                                                                                                    |
| 3    |                                                | Normal flora and probiotics                                             | bacteriology    |                                                                                          |                                                                                                                                                    |
| 4    |                                                | Microbial Genetics                                                      | bacteriology    |                                                                                          |                                                                                                                                                    |
| 5    |                                                | Staphylococci                                                           | bacteriology    |                                                                                          |                                                                                                                                                    |
| 6    |                                                | Streptococci and Pneumococci                                            | bacteriology    |                                                                                          |                                                                                                                                                    |
| 7    |                                                | Neisseria                                                               | bacteriology    |                                                                                          |                                                                                                                                                    |
| 8    |                                                | Mycobacterium                                                           | bacteriology    |                                                                                          |                                                                                                                                                    |

|    |  |                                                                                         |              |  |  |
|----|--|-----------------------------------------------------------------------------------------|--------------|--|--|
| 9  |  | Corynebacterium and Listeria                                                            | bacteriology |  |  |
| 10 |  | Enterobacteriaceae 1                                                                    | bacteriology |  |  |
| 11 |  | Enterobacteriaceae 2                                                                    | bacteriology |  |  |
| 12 |  | Yersinia, Pasteurella & Francisella, Pseudomonas Acinetobacter, Aeromonas & Plesiomonas | bacteriology |  |  |
| 13 |  | Vibrio, Campylobacters & Helicobacter                                                   | bacteriology |  |  |
| 14 |  | Haemophilus, Brucella & Bordetella, Legionella                                          | bacteriology |  |  |
| 15 |  | Aerobic Bacilli: Bacillus anthracis & Bacillus cereus                                   | bacteriology |  |  |

## 11. Course Evaluation

- Midterm and final exams.
- Quizzes during lectures and laboratory sessions.
- Short-answer questions during lectures.
- Group discussions.
- Practical exams and lab experiments.
- Seminars.

## 12. Learning and Teaching Resources

|                                                                       |                                                                       |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                         | Medical Microbiology by Jawetz Melnick<br>Adelberg's (latest edition) |
| Main references (sources)                                             | Microbiology: An Introduction<br>Brock Biology of Microorganisms      |
| Recommended books and references<br>(scientific journals, reports...) |                                                                       |
| Electronic References, Websites                                       |                                                                       |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clinical Nutrition and Family Medicine                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| COMCom-32                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 1 <sup>st</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Course Objectives</b>                                                   | <p>This course provides the student with basic knowledge and skills in community and family medicine/ Biostatistics</p> <p>This course provides the student with basic knowledge and skills in community and family medicine</p>                                                                                                                                                                                                                                                                              |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Strategy</b>                                                            | <p>1.Delivering theoretical lectures using available presentation techniques (data show projectors and smart board).</p> <p>2.Learning the correct scientific methods for collecting clinical samples, conducting data for scientific research</p> <p>3.Developing students' skills through mental questions, answers, and special tests in practical session</p> <p>4.The student is required to write scientific topics related to the use of online research</p> <p>5. E learning and google classroom</p> |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Week                                     | Hours | Unit name/topic           | Teaching method                                                                           | Evaluation method                                |
|------------------------------------------|-------|---------------------------|-------------------------------------------------------------------------------------------|--------------------------------------------------|
| Introduction for biostatistics           | 1     | Clinical<br>Biostatistics | Different methods<br>Classic lecture<br>Group discussion<br>Seminar<br>Practical sessions | Quizes<br>Reports<br>Discussion<br>Mid term exam |
| Presentation of data ( mathematical )    | 2     |                           |                                                                                           |                                                  |
| Presentation of data (tables)            | 1     |                           |                                                                                           |                                                  |
| Presentation of data ( chart and graph ) | 2     |                           |                                                                                           |                                                  |
| Analytic biostatistics                   | 1     |                           |                                                                                           |                                                  |
| Estimation                               | 1     |                           |                                                                                           |                                                  |
| Hypothesis                               | 1     |                           |                                                                                           |                                                  |
| T test                                   | 1     |                           |                                                                                           |                                                  |
| Z test                                   | 1     |                           |                                                                                           |                                                  |

|                           |  |  |  |                 |
|---------------------------|--|--|--|-----------------|
| Chi square<br>Correlation |  |  |  | Final term exam |
|---------------------------|--|--|--|-----------------|

| 11.Course Evaluation                                                  |                                                                      |
|-----------------------------------------------------------------------|----------------------------------------------------------------------|
| 1.                                                                    | Theoretical exams (mid-year + end of year).                          |
| 2.                                                                    | Practical exam: (oral exam, skill exam, practical information exam). |
| 3.                                                                    | Reports.                                                             |
| 4.                                                                    | Seminars by students.                                                |
| 12. Learning and Teaching Resources                                   |                                                                      |
| Required textbooks (curricular books, if any)                         | World Health Organization                                            |
| Main references (sources)                                             |                                                                      |
| Recommended books and references<br>(scientific journals, reports...) |                                                                      |
| Electronic References, Websites                                       |                                                                      |

**3<sup>rd</sup> year / 2<sup>nd</sup> semester**  
**Course Description Form**

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| General Surgery                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Surg-11                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2 <sup>nd</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of surgical principles to the medical students to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the emergent conditions, in a way to participate in optimizing the medical services to the society                                                                                                                                                       |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Strategy</b>                                                            | This course is given as one lecture per week for 1 hour each. The lectures are interactive and composed of PowerPoint presentations, images, and videos to illustrate concepts and procedures. Case-based learning with pre- and post-questions. Online resources such as online meetings, social media groups and e-books can supplement traditional lectures and provide additional opportunities for learning as well as various student tasks to implement self-directed learning. |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Week | Hours | Required learning outcomes                                                                     | Unit/Module or Topic Title | Teaching Method            | Assessment Method                            |
|------|-------|------------------------------------------------------------------------------------------------|----------------------------|----------------------------|----------------------------------------------|
| 1    | 1     | <ul style="list-style-type: none"> <li>focused on providing students with essential</li> </ul> | Varicose Veins             | Theoretical lectures using | Oral questions at the end of the theoretical |
| 2    | 1     |                                                                                                | DVT                        |                            |                                              |
| 3    | 1     |                                                                                                | Chronic Venous             |                            |                                              |

|    |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                  |                                                               |                                                           |
|----|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------------------------|-----------------------------------------------------------|
|    |   | surgical knowledge and practical clinical skills.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | insufficiency and leg ulceration | projectors and smart board + practical experiments and skills | lecture, and discussion with students about the lecture . |
| 4  | 1 | <ul style="list-style-type: none"> <li>Through a series of lectures, students will gain a comprehensive understanding of surgery's historical evolution and modern scope, including critical aseptic and antiseptic practices.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                          | Lymphatic Disorders              |                                                               |                                                           |
| 5  | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Chronic Arterial insufficiency   |                                                               |                                                           |
| 6  | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Acute arterial occlusion         |                                                               |                                                           |
| 7  | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Gangrene & Amputation            |                                                               |                                                           |
| 8  | 1 | The course covers :                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Vasospastic disorders            |                                                               |                                                           |
| 9  | 1 | <ul style="list-style-type: none"> <li>Definitions, classification, concept of grading and staging, etiology, pathogenesis and behavior of benign and malignant tumors. List modality of spread of malignant tumors, ways of diagnosis and screening and methods of treatment.</li> <li>Definitions, classification, causes of each item, outline the clinical features, diagnosis and line of management of Ulcers, sinuses and fistulae.</li> <li>Etiology including precipitating factors, pathophysiology, clinical features, classification, investigations and management of diabetic foot and gangrene , diseases of lymphatic ,</li> </ul> | Aneurysm & Arteritis             |                                                               |                                                           |
| 10 | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Venous injury & Venous tumours   |                                                               |                                                           |
| 11 | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Burn                             |                                                               |                                                           |
| 12 | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Graft and Flap                   |                                                               |                                                           |
| 13 | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Ulcers , fistula, & sinus        |                                                               |                                                           |
| 14 | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Oncology                         |                                                               |                                                           |
| 15 | 1 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Organ Transplantation            |                                                               |                                                           |

|  |  |                                                                                                                         |  |  |  |
|--|--|-------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  |  | diseases of veins and DVT , peripheral arterial disease , burn, skin, graft and implants and principles of transplants. |  |  |  |
|--|--|-------------------------------------------------------------------------------------------------------------------------|--|--|--|

## 11.Course Evaluation

- Quizzes & Assignments (6%) – Regular short quizzes and assignments test students’ grasp of fundamental surgical concepts, ensuring continuous engagement and learning.
- Mid-Term Exam (24%) – A structured theory exam assesses knowledge retention and application of surgical principles covered in the first half of the semester.
- Final Theory Exam (70%) – A comprehensive written exam evaluates the students' ability to integrate and apply their surgical knowledge across all topics studied during the course.

## 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                  |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | •Bailey & Love’s Short Practice of Surgery (Essential reference for surgical principles and procedures).                         |
| Main references (sources)                                          | •Research articles, surgical journals, and updated clinical protocols from trusted sources like WHO, CDC, surgical associations. |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                  |
| Electronic References, Websites                                    |                                                                                                                                  |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Internal Medicine                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Med-14                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 2 <sup>nd</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Course Objectives</b>                                                   | <p>By the end of this course, students will be able to:</p> <ol style="list-style-type: none"> <li>1. Understand the principles of infectious diseases, their transmission, and management.</li> <li>2. Describe the structure and function of the immune system and its role in infection and autoimmunity.</li> <li>3. Recognize bacterial, viral, fungal, and parasitic infections, their pathogenesis, and treatment.</li> </ol> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Strategy</b>                                                            | <ul style="list-style-type: none"> <li>• Lectures: Conceptual explanations with real-life examples</li> <li>• Case-Based Learning: Clinical cases to integrate knowledge</li> </ul>                                                                                                                                                                                                                                                  |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| Week | Hours   | Unit/Module or Topic Title                                                | Teaching Method                       | Assessment Method        |
|------|---------|---------------------------------------------------------------------------|---------------------------------------|--------------------------|
| 1    | 2 Hours | 1. Principle of infectious disease.<br>2. Management of poisoned patients | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 2    | 2 Hours | 3. Fever<br>4. Poisoning by common agents                                 | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 3    | 2 Hours | 5. Pyrexia of Unknown Origin.                                             | *PPT presentation                     | *Assay Questions<br>*MCQ |

|    |         |                                                                     |                                       |                          |
|----|---------|---------------------------------------------------------------------|---------------------------------------|--------------------------|
|    |         | 6. CO & Organophosphorus Agents.                                    | *Case Discussion                      |                          |
| 4  | 2 Hours | 7. Viral infection-I<br>8. Envenomation.                            | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 5  | 2 Hours | 9. Viral Infection-II<br>10. Anatomy & Physiology of Immune system. | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 6  | 2 Hours | 11. Bacterial Infection-I.<br>12. Immune Deficiency.                | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 7  | 2 Hours | 13. Bacterial Infection-II<br>14. Inflammatory Response             | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 8  | 2 Hours | Midterm Examination                                                 |                                       |                          |
| 9  | 2 Hours | 15. Bacterial Infection-III.<br>16. Autoimmunity.                   | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 10 | 2 Hours | 17. Fungal infection<br>18. Allergy.                                | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 11 | 2 Hours | 19. Parasitic infection-I<br>20. Anaphylaxis.                       | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 12 | 2 Hours | 21. Parasitic Infection-II.<br>22. Angioedema.                      | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 13 | 2 Hours | 23. Antibacterial agents.<br>24. Transplantation medicine           | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |
| 14 | 2 Hours | 25. Antiviral & Antifungal agents.                                  | *PPT presentation                     | *Assay Questions<br>*MCQ |

|    |         |                                                              |                                       |                          |
|----|---------|--------------------------------------------------------------|---------------------------------------|--------------------------|
|    |         | 26. Case based Discussion.                                   | *Case Discussion                      |                          |
| 15 | 2 Hours | 27. Complementary Medicine 1<br>28. Evaluating CAM Therapies | *PPT presentation<br>*Case Discussion | *Assay Questions<br>*MCQ |

### 11.Course Evaluation

A1: Explain the pathophysiology and clinical features of infectious diseases and immune disorders.

A2: Identify the pharmacology and mechanism of action of antimicrobial and immunomodulatory drugs.

A3: Describe the toxicological impact of common poisons and management strategies.

### 12. Learning and Teaching Resources

|                                                                    |  |
|--------------------------------------------------------------------|--|
| Required textbooks (curricular books, if any)                      |  |
| Main references (sources)                                          |  |
| Recommended books and references (scientific journals, reports...) |  |
| Electronic References, Websites                                    |  |

|                                                                            |                                                                                                                                                                                               |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                               |
| Internal Medicine                                                          |                                                                                                                                                                                               |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                               |
| Med-14                                                                     |                                                                                                                                                                                               |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                               |
| 2 <sup>nd</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                               |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                               |
| 11/5/2025                                                                  |                                                                                                                                                                                               |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                               |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                               |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                               |
| 30                                                                         |                                                                                                                                                                                               |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                               |
| Name:                                                                      |                                                                                                                                                                                               |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                               |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>*Develop systematic examination techniques.</li> <li>*Identify normal vs. abnormal findings</li> <li>*Enhance doctor-patient communication.</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                               |
| <b>Strategy</b>                                                            | <ul style="list-style-type: none"> <li>• Lectures: Conceptual explanations with real-life examples</li> <li>• Case-Based Learning: Clinical cases to integrate knowledge</li> </ul>           |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                               |

| Week            | Hours | Unit/Module or Topic Title                                                                                                                                                                                                                                                                                                                                                         | Teaching Method   | Assessment Method                       |
|-----------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------------|
| 1 <sup>st</sup> | 2     | <b>Preparation &amp; Introduction</b> <ul style="list-style-type: none"> <li>• <b>Wash hands &amp; sanitize</b> before and after examining the patient.</li> <li>• <b>Introduce yourself</b> and obtain <b>patient consent</b>.</li> <li>• Ensure <b>proper lighting, privacy, and patient comfort</b>.</li> <li>• Position the patient appropriately (sitting, lying).</li> </ul> | Clinical Sessions | *OSCE Station<br>*Short case discussion |

|                 |   |                                                                                                                                                                                                                                                                                                                                                      |                   |                                         |
|-----------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------------|
| 2 <sup>nd</sup> | 2 | <ul style="list-style-type: none"> <li>Observe the patient's <b>general appearance</b> (alert, in distress, comfortable).</li> </ul>                                                                                                                                                                                                                 | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 3 <sup>rd</sup> | 2 | <ul style="list-style-type: none"> <li>Look for <b>signs of illness</b>, such as pallor, jaundice, cyanosis, dehydration.</li> </ul>                                                                                                                                                                                                                 | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 4 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>Assess <b>nutritional status</b>, posture, and gait.</li> </ul>                                                                                                                                                                                                                                               | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 5 <sup>th</sup> | 2 | <b>Vital Signs Assessment</b> <ul style="list-style-type: none"> <li><b>Temperature</b> (oral, axillary, rectal)</li> <li><b>Pulse</b> (rate, rhythm, volume)</li> <li><b>Respiratory rate</b> (rate, pattern, effort)</li> <li><b>Blood pressure</b> (both arms, correct cuff size)</li> <li><b>Oxygen saturation (SpO<sub>2</sub>)</b>.</li> </ul> | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 6 <sup>th</sup> | 2 | <b>Skin and Nails</b> <ul style="list-style-type: none"> <li>Inspect for <b>color changes</b> (pallor, jaundice, cyanosis).</li> <li>Look for <b>rashes, lesions, scars, ulcers</b>.</li> <li>Check nails for <b>clubbing, cyanosis, pallor, splinter hemorrhages</b>.</li> </ul>                                                                    | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 7 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li><b>Head:</b> Inspect for trauma, asymmetry, or swellings.</li> <li><b>Eyes:</b> Check pupil size, reaction to light, scleral color, conjunctiva.</li> </ul>                                                                                                                                                   | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 8 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>Clinical training Review.</li> </ul>                                                                                                                                                                                                                                                                          | Clinical Sessions |                                         |
| 9 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li><b>Ears:</b> Look for discharge, hearing assessment.</li> <li><b>Nose:</b> Assess patency, any deformities, nasal discharge.</li> </ul>                                                                                                                                                                       | Clinical Sessions | *OSCE Station<br>*Short case discussion |

|                  |   |                                                                                                                                                                                                                                    |                   |                                         |
|------------------|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------|-----------------------------------------|
| 10 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>• <b>Throat &amp; Oral Cavity:</b> Check for ulcers, hydration, tongue appearance.</li> <li>• <b>Lymph Nodes:</b> Palpate cervical, submandibular, axillary, and inguinal nodes.</li> </ul> | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 11 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>• Examination of Oedema.</li> <li>• Localized or generalized.</li> </ul>                                                                                                                    | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 12 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>• Examination of lower limb</li> <li>• Look, Feel &amp; move.</li> </ul>                                                                                                                    | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 13 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>• <b>Supervised practice</b> on real patients.</li> </ul>                                                                                                                                   | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 14 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>• <b>Supervised practice</b> on real patients.</li> </ul>                                                                                                                                   | Clinical Sessions | *OSCE Station<br>*Short case discussion |
| 15 <sup>th</sup> | 2 | <ul style="list-style-type: none"> <li>• <b>Supervised practice</b> on real patients.</li> </ul>                                                                                                                                   | Clinical Sessions | *OSCE Station<br>*Short case discussion |

## 11.Course Evaluation

Observe the candidate examination methods

## 12. Learning and Teaching Resources

|                                                                    |  |
|--------------------------------------------------------------------|--|
| Required textbooks (curricular books, if any)                      |  |
| Main references (sources)                                          |  |
| Recommended books and references (scientific journals, reports...) |  |
| Electronic References, Websites                                    |  |

|                                                                            |                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                        |
| Pathology                                                                  |                                                                                                                                                                                                                                                                                        |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                        |
| PATpat-31                                                                  |                                                                                                                                                                                                                                                                                        |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                        |
| 2 <sup>nd</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                        |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                        |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                        |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                        |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                        |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                        |
| 120                                                                        |                                                                                                                                                                                                                                                                                        |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                        |
| Name:                                                                      |                                                                                                                                                                                                                                                                                        |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                        |
| <b>Course Objectives</b>                                                   | Develop the student's knowledge, skill, and attitude related to pathogenesis, morphological (microscopic and macroscopic pictures) and clinical manifestations of basic pathological processes and specific diseases at the molecular, cellular, tissue, organs, and whole body level. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                        |
| <b>Strategy</b>                                                            | 1. Illustrate microscopic data of different pathological lesions.<br>2- Differentiate between different diagnoses to arrive at a preferred or definitive diagnosis.                                                                                                                    |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                        |

| Week  | Hours                                            | Required learning outcomes | Unit name/topic | Teaching method                                                                          | Evaluation method                                                                                      |
|-------|--------------------------------------------------|----------------------------|-----------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 1+2+3 | 12 hours theoretical + 12 hours practical weekly | Gastrointestinal tract.    | Pathology       | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + |

|              |                                         |                                            |    |    |                                             |
|--------------|-----------------------------------------|--------------------------------------------|----|----|---------------------------------------------|
|              |                                         |                                            |    |    | writing a report on the results of the work |
| <b>4+5</b>   | <sup>^</sup> hr. + <sup>^</sup> hr labs | <b>Liver, biliary tract &amp; pancreas</b> | // | // | //                                          |
| <b>6+7</b>   | 8hr.+ <sup>^</sup> hr. labs             | <b>Urinary system</b>                      | // | // | //                                          |
| <b>8</b>     | 4hr.+ <sup>ξ</sup> hr. labs             | <b>Female genital tract</b>                | // | // | //                                          |
| <b>9</b>     | <b>4hr.+<sup>ξ</sup> hr. labs</b>       | <b>breast</b>                              | // | // | //                                          |
| <b>10+11</b> | 8hr.+ 8hr. labs                         | <b>Endocrine system</b>                    | // | // | //                                          |
| <b>12</b>    | 4hr + 4hr.labs                          | <b>Skin</b>                                | // | // | //                                          |
| <b>13</b>    | 4hr. + 4hr.labs                         | <b>Bones and joints</b>                    | // | // | //                                          |
| <b>14</b>    | 4hr +4hr. labs                          | <b>Central nervous system</b>              | // | // | //                                          |
| <b>15</b>    | 4hr +4hr. labs                          | <b>Male Genital tract</b>                  | // | // | //                                          |

## 11.Course Evaluation

- Midterm and final exams.
- Quizzes during lectures and laboratory sessions.
- Short-answer questions during lectures.
- Group discussions.
- Practical exams and lab experiments.
- Seminars.

## 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                       |
|--------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | M1. Robbins basic pathology 10th ed                                                                                                                   |
| Main references (sources)                                          | Text book of pathology By Muir's 1.<br>Text book of pathology By Muir's 1.<br>Text book of pathology By Muir's 1.<br>Text book of pathology By Muir's |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                       |

|                                 |  |
|---------------------------------|--|
| Electronic References, Websites |  |
|---------------------------------|--|

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Pharmacology                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Phar.5                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2 <sup>nd</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 75                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>• To critically assess the basic concepts in pharmacology and the pharmacological basis of therapeutics.</li> <li>–To introduce students to the core principles of drug action in terms of bioavailability, pharmacokinetics, pharmacodynamics and mechanism of action of drugs in the treatment of diseases.</li> <li>–To introduce students to critically assess drug efficacy, side effects, toxicities,</li> <li>–drug interactions and special emphasis on dosage concerns in special populations such as the young, pregnant women and in the elderly.</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Strategy</b>                                                            | <ul style="list-style-type: none"> <li>•Use modern teaching aids such as PowerPoint presentations, animations, &amp; whiteboards for clarification.</li> <li>•Practical applications of laboratory diagnostics.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |

| Week | Hours               | Required learning outcomes                          | Teaching method | Evaluation method |
|------|---------------------|-----------------------------------------------------|-----------------|-------------------|
| 1    | 3 hours theoretical | - Introduction and basic principles of chemotherapy | Theoretical     | Oral questions    |

|    |                             |                                                                                                                                                   |                                                                                                |                                                                                                                                                                                                                                                               |
|----|-----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    | + 2 hours practical weekly. | - sulfonamides<br>- Quinolones                                                                                                                    | lectures using projectors and smart board + practical experiments and skills, PPT presentation | at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work.<br>+<br>- Short exams.<br>-Half course.<br>- End of course.<br><br>Success from the second stage (3rd stage) students. / |
| 2  |                             | -B-Lactam antibiotics.<br>-aminoglycosides.<br>- macrolides and keloids .                                                                         |                                                                                                |                                                                                                                                                                                                                                                               |
| 3  |                             | - Tetracycline and chloramphenicol.<br>- anti mycobacterial drugs.<br>- antifungal drugs.                                                         |                                                                                                |                                                                                                                                                                                                                                                               |
| 4  |                             | -anti-amoebic and other antiprotozoal drugs.<br>-anti-helminthic agents.<br>-antiviral.                                                           |                                                                                                |                                                                                                                                                                                                                                                               |
| 5  |                             | -anti-AIDS drugs.<br>-chemotherapy of UTI &STDS.<br>-basic principle of cancer chemotherapy.                                                      |                                                                                                |                                                                                                                                                                                                                                                               |
| 6  |                             | -pharmacology of pituitary and hypothalamic hormones<br>-thyroid hormones and ant thyroid drugs<br>- estrogen, progesterone and inhibitors        |                                                                                                |                                                                                                                                                                                                                                                               |
| 7  |                             | - Oral contraceptive.<br>-HRT, hormone replacement therapy.<br>-Androgen.                                                                         |                                                                                                |                                                                                                                                                                                                                                                               |
| 8  |                             | -Drugs for diabetes mellitus: Insulin and oral ant diabetic agents I.<br>- Drugs for diabetes mellitus: Insulin and oral anti-diabetic agents II. |                                                                                                |                                                                                                                                                                                                                                                               |
| 9  |                             | Mid. Exam.                                                                                                                                        | Theoretical lectures using projectors and smart board +                                        |                                                                                                                                                                                                                                                               |
| 10 |                             | -Adreno-corticosteroids (corticosteroids and antagonists).                                                                                        |                                                                                                |                                                                                                                                                                                                                                                               |

|    |  |                                                                                                                                                                                                                                                |                                                    |                                                                                                                                                                                                                                                                                           |
|----|--|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|    |  | <ul style="list-style-type: none"> <li>- parathyroid hormones and drugs affecting calcium balance.</li> <li>- drugs acting on uterus.</li> </ul>                                                                                               | practical experiments and skills, PPT presentation | <p>Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work.</p> <p>+<br/>- Short exams.<br/>- Half course.<br/>- End of course.</p> <p>Success from the second stage (3rd stage) students.</p> |
| 11 |  | <ul style="list-style-type: none"> <li>- Drugs treatment for infertility and erectile dysfunction.</li> <li>- anti- epileptics.</li> <li>- anti-Parkinson's drugs.</li> </ul>                                                                  |                                                    |                                                                                                                                                                                                                                                                                           |
| 12 |  | <ul style="list-style-type: none"> <li>- Antipsychotics.</li> <li>- Local anesthetics.</li> <li>- general anesthetics.</li> </ul>                                                                                                              |                                                    |                                                                                                                                                                                                                                                                                           |
| 13 |  | <ul style="list-style-type: none"> <li>-GIT: anti-muscarinic drugs and drugs acting on intestinal motility.</li> <li>-anti emetics drugs regulating appetite, drugs.</li> <li>-drugs regulating stomach secretion, antiulcer drugs.</li> </ul> |                                                    |                                                                                                                                                                                                                                                                                           |
| 14 |  | <ul style="list-style-type: none"> <li>-drugs acting on respiratory system.</li> <li>- mast cell stabilizer / anti IGE antibodies.</li> <li>-respiratory stimulants.</li> <li>-pul. surfactant, expectorant. -- miscellaneous.</li> </ul>      |                                                    |                                                                                                                                                                                                                                                                                           |
| 15 |  | Complementary therapy                                                                                                                                                                                                                          |                                                    |                                                                                                                                                                                                                                                                                           |

| 11.Course Evaluation                                                                                                                                                                                                                                                                           |                                                                                   |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| <ul style="list-style-type: none"> <li>• Midterm and final exams.</li> <li>• Quizzes during lectures and laboratory sessions.</li> <li>• Short-answer questions during lectures.</li> <li>• Group discussions.</li> <li>• Practical exams and lab experiments.</li> <li>• Seminars.</li> </ul> |                                                                                   |
| 12. Learning and Teaching Resources                                                                                                                                                                                                                                                            |                                                                                   |
| Required textbooks (curricular books, if any)                                                                                                                                                                                                                                                  | Goodman and Gilman's, The Pharmacological Basis of Therapeutics, 14th ed. (2022). |

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Virology                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Viro-11                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 2 <sup>nd</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| 60                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Course Objectives</b>                                                   | <p>. Introduction to medical virology (discovery of viruses, virus structure, chemical components of the virus) and clarification of the sizes of medically important viruses and their role in causing and controlling diseases.</p> <ul style="list-style-type: none"> <li>• . Discussing the types of human viruses, the diseases they cause, and methods of diagnosing, treating, and preventing them</li> <li>• Learn about the techniques used in its diagnosis, how to select the sample, and the most important modern examinations and tests used.</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Strategy</b>                                                            | <p>Practice the diagnosis of viral diseases</p> <ul style="list-style-type: none"> <li>• Identify the relationship between various medical viruses and some diseases and practice taking live models and samples and examining them</li> <li>• Learn methods for collecting pathological viral samples.</li> <li>• Recognizing the danger of dealing with pathogenic viruses and contaminated samples to the surrounding environment.</li> </ul>                                                                                                                       |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |

| Week | Hours                                          | Required learning outcomes    | Unit name/topic | Teaching method                                                   | Evaluation method                                                         |
|------|------------------------------------------------|-------------------------------|-----------------|-------------------------------------------------------------------|---------------------------------------------------------------------------|
| 1    | 2 hours theoretical + 2 hours practical weekly | General principle of virology | Virology        | Theoretical lectures using projectors and smart board + practical | Oral questions at the end of the theoretical lecture, and discussion with |
| 2    |                                                | Properties of viruses         | Virology        |                                                                   |                                                                           |

|    |  |                                                                                                    |          |                        |                                                                          |
|----|--|----------------------------------------------------------------------------------------------------|----------|------------------------|--------------------------------------------------------------------------|
| 3  |  | Chemical composition of viruses                                                                    | Virology | experiments and skills | students about the lecture + writing a report on the results of the work |
| 4  |  | Orthomyxoviridae                                                                                   | Virology |                        |                                                                          |
| 5  |  | Paramyxoviridae                                                                                    | Virology |                        |                                                                          |
| 6  |  | Coronaviridae                                                                                      | Virology |                        |                                                                          |
| 7  |  | Poxviridae                                                                                         | Virology |                        |                                                                          |
| 8  |  | Herpesviridae                                                                                      | Virology |                        |                                                                          |
| 9  |  | HIV                                                                                                | Virology |                        |                                                                          |
| 10 |  | Rioviridae                                                                                         | Virology |                        |                                                                          |
| 11 |  | Hepatitis viruses                                                                                  | Virology |                        |                                                                          |
| 12 |  | Human papilloma virus                                                                              | Virology |                        |                                                                          |
| 13 |  |                                                                                                    | Virology |                        |                                                                          |
| 14 |  | Hookworms: Trichostrongylus, Trichinella spiralis, filaria.                                        | Virology |                        |                                                                          |
| 15 |  | Trematodes: Introduction, blood flukes: Schistosoma. Other flukes: Intestinal, pulmonary, hepatic. | Virology |                        |                                                                          |

## 11. Course Evaluation

- Midterm and final exams.
- Quizzes during lectures and laboratory sessions.
- Short-answer questions during lectures.
- Group discussions.
- Practical exams and lab experiments.
- Seminars.

## 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                              |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <ul style="list-style-type: none"> <li>• Department Books</li> <li>• Text Book</li> <li>• Practical Book</li> <li>• Atlas</li> <li>• Self evaluation guide (book)</li> </ul> |
| Main references (sources)                                          |                                                                                                                                                                              |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                              |
| Electronic References, Websites                                    |                                                                                                                                                                              |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| parasitology                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 2 <sup>nd</sup> semester / 3 <sup>rd</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 3 <sup>rd</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 60                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>• Definition and introduction to the most important medical parasites (protozoa and metazoa) and an explanation of their most important diseases and their role in causing and controlling diseases.</li> <li>• Identify the most important infectious diseases and methods of diagnosing, treating and preventing them.</li> <li>• Learn about the techniques used in its diagnosis, how to select the sample, and the most important modern examinations and tests used.</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>Strategy</b>                                                            | Practice the diagnosis of viral diseases <ul style="list-style-type: none"> <li>• Identify the relationship between various medical viruses and some diseases and practice taking live models and samples and examining them</li> <li>• Learn methods for collecting pathological viral samples.</li> <li>• Recognizing the danger of dealing with pathogenic viruses and contaminated samples to the surrounding environment.</li> </ul>                                                                                    |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |

| Week | Hours                                             | Required learning outcomes                                                                                | Unit name/topic | Teaching method                                                                          | Evaluation method                                                                                                                                  |
|------|---------------------------------------------------|-----------------------------------------------------------------------------------------------------------|-----------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 2 hours theoretical +<br>2 hours practical weekly | <i>General parasitology</i>                                                                               | parasitology    | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work |
| 2    |                                                   | Entamoeba histolytica, Non-pathogenic amoeba spp.                                                         | parasitology    |                                                                                          |                                                                                                                                                    |
| 3    |                                                   | .Flagellates: Intestinal, Oral and Genital Flagellates (Giardia lamblia, Trichomonas vaginalis, T.tenax). | parasitology    |                                                                                          |                                                                                                                                                    |
| 4    |                                                   | Blood and tissue flagellates: Old World Leishmaniasis (Leishmania donovani,                               | parasitology    |                                                                                          |                                                                                                                                                    |

|    |  |                                                                                                                                                 |              |  |  |
|----|--|-------------------------------------------------------------------------------------------------------------------------------------------------|--------------|--|--|
|    |  | L. infantum, L.tropica, L.major and L. aethiopica).                                                                                             |              |  |  |
| 5  |  | Blood and tissue<br>Flagellates: New World<br>Leishmaniasis<br>(L.braziliensis complex,<br>L.mexicana complex, L.<br>peruviana and<br>L.chagasi | parasitology |  |  |
| 6  |  | .Blood and Tissue<br>Flagellates<br>Trypanosomes<br>(Trypanosom abrucei<br>T.gambiense,<br>T.rhodesiense, T.cruzi)                              | parasitology |  |  |
| 7  |  | Sporozoa:<br>Cryptosporidium<br>parvum, Balantidium<br>coli.                                                                                    | parasitology |  |  |
| 8  |  | Sporozoa: Malaria                                                                                                                               | parasitology |  |  |
| 9  |  | Sporozoa: Toxoplasma<br>gondii, Sarcocystis and<br>Babesia.                                                                                     | parasitology |  |  |
| 10 |  | Cestodes: Introduction,<br>Echinococcus<br>granulosus and<br>multilocularis                                                                     | parasitology |  |  |
| 11 |  | Cestodes: Taenia<br>solium, Taenia<br>saginata, Dipylidium<br>caninum,<br>Diphylobothrium latum.                                                | parasitology |  |  |
| 12 |  | Nematodes:<br>Introduction, Enterobius<br>vermicularis, Trichuris<br>trichiura                                                                  | parasitology |  |  |
| 13 |  | Nematodes: Ascaris<br>lumbricoides,<br>Strongyloides<br>stercoralis                                                                             | parasitology |  |  |
| 14 |  | Hookworms:<br>Trichostrongylus,<br>Trichinella spiralis,<br>filaria.                                                                            | parasitology |  |  |
| 15 |  | Trematodes:<br>Introduction, blood<br>flukes: Schistosoma.<br>Other flukes: Intestinal,<br>pulmonary, hepatic.                                  | parasitology |  |  |

### 11.Course Evaluation

- Midterm and final exams.
- Quizzes during lectures and laboratory sessions.
- Short-answer questions during lectures.

- Group discussions.
- Practical exams and lab experiments.
- Seminars.

## 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                              |
|--------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <ul style="list-style-type: none"> <li>• Department Books</li> <li>• Text Book</li> <li>• Practical Book</li> <li>• Atlas</li> <li>• Self evaluation guide (book)</li> </ul> |
| Main references (sources)                                          |                                                                                                                                                                              |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                              |
| Electronic References, Websites                                    |                                                                                                                                                                              |

### 1. Course Name:

Clinical Nutrition and Family Medicine

### 2. Course Code:

COMCom-32

### 3. Semester / Year:

2<sup>nd</sup> semester / 3<sup>rd</sup> year

### 4. Description Preparation Date:

11/5/2025

### 5. Available Attendance Forms:

3<sup>rd</sup> stage students

### 6. Number of Credit Hours (Total) / Number of Units (Total) :

60

### 7. Course administrator's name (mention all, if more than one name)

Name:

### 8. Course Objectives

|                          |                                                                                                                                                                                                                                         |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course Objectives</b> | <p>-This course provides the student with basic knowledge and skills in community and family medicine/ Clinical Nutrition.</p> <p>This course provides the student with basic knowledge and skills in community and family medicine</p> |
|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 9. Teaching and Learning Strategies

|                 |                                                                                                                                                                                                                                                                                                                                                                   |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Strategy</b> | <p>1.Delivering theoretical lectures using available presentation techniques (data show projectors and smart board).</p> <p>2.Learning the correct scientific methods for collecting clinical samples, conducting data for scientific research</p> <p>3.Developing students' skills through mental questions, answers, and special tests in practical session</p> |
|-----------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|  |                                                                                                                                  |
|--|----------------------------------------------------------------------------------------------------------------------------------|
|  | 4.The student is required to write scientific topics related to the use of online research<br>5. E learning and google classroom |
|--|----------------------------------------------------------------------------------------------------------------------------------|

## 10. Course Structure

| Week                                | Hours | Unit name/topic    | Teaching method                                                                           | Evaluation method                                                                   |
|-------------------------------------|-------|--------------------|-------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 1. Introduction of nutrition        | 1     | Clinical nutrition | Different methods<br>Classic lecture<br>Group discussion<br>Seminar<br>Practical sessions | Quizes<br><br>Reports<br><br>Discussion<br><br>Mid term exam<br><br>Final term exam |
| 2. Carbohydrates                    | 1     |                    |                                                                                           |                                                                                     |
| 3. Proteins                         | 1     |                    |                                                                                           |                                                                                     |
| 4. Lipids                           | 1     |                    |                                                                                           |                                                                                     |
| 5. Vitamins                         | 1     |                    |                                                                                           |                                                                                     |
| 6. Minerals                         | 1     |                    |                                                                                           |                                                                                     |
| 7. Water                            | 1     |                    |                                                                                           |                                                                                     |
| 8. Energy                           | 1     |                    |                                                                                           |                                                                                     |
| 9. Obesity                          | 1     |                    |                                                                                           |                                                                                     |
| 10. Introduction of family medicine | 1     |                    |                                                                                           |                                                                                     |
| 11. Communication skills            | 1     |                    |                                                                                           |                                                                                     |
| 12. Breaking bad news               | 1     |                    |                                                                                           |                                                                                     |
| 13. Dealing with angry patient      | 1     |                    |                                                                                           |                                                                                     |
| 14. Smoking cessation               | 1     |                    |                                                                                           |                                                                                     |

## 11.Course Evaluation

1. Theoretical exams (mid-year + end of year).
2. Practical exam: (oral exam, skill exam, practical information exam).
3. Reports.
4. Seminars by students.

## 12. Learning and Teaching Resources

|                                                                       |                                                        |
|-----------------------------------------------------------------------|--------------------------------------------------------|
| Required textbooks (curricular books, if any)                         | Taylor Family Medicine textbook                        |
| Main references (sources)                                             | William clinical nutrition<br>Family Medicine Practice |
| Recommended books and references<br>(scientific journals, reports...) |                                                        |
| Electronic References, Websites                                       |                                                        |

**4<sup>th</sup> year / 1<sup>st</sup> semester**  
**Course Description Form**

|                                                                            |                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                  |
| Obstetrics &gynecology                                                     |                                                                                                                                                                                                                                                                                                                                  |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                  |
| Gyn.22                                                                     |                                                                                                                                                                                                                                                                                                                                  |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                  |
| 1 <sup>st</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                  |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                  |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                  |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                  |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                  |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                  |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                  |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                  |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                  |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                  |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of obstetrics to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the emergent conditions, in a way to participate in optimizing the medical services to the society |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                  |
| <b>Strategy</b>                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                                            |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                  |

| Week | Hours | Unit/Module or Topic Title                                                                                                | Teaching Method                                                                          | Assessment Method                                                                                    |
|------|-------|---------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1st  | 2hrs. | Clinical anatomy of the female & reproductive tract<br>Ovulation, Fertilization, Early Developments Of Fetus And Placenta | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture |

|      |       |                                                                                                   |    |    |
|------|-------|---------------------------------------------------------------------------------------------------|----|----|
|      |       | &Physiological Changes In Pregnancy I                                                             |    |    |
| 2nd  | 2hrs. | Physiological Changes In Pregnancy II& Normal Fetal Developments & Growth I                       | // | // |
| 3rd  | 2hrs. | Normal Fetal Developments &Growth II& Antenatal Imaging & Assessment Of Fetal Well-Being I        | // | // |
| 4th  | 2hrs. | Antenatal imaging & Assessment Of Fetal Well-Being II.& Minor problems Of Pregnancy.              | // | // |
| 5th  | 2hrs. | Antenatal Care I & II.                                                                            | // | // |
| 6th  | 2hrs. | Normal Labor I (Anatomy Of Female Pelvis And Fetal Skull) &Normal Labor II (Physiology of labor). | // | // |
| 7th  | 2hrs. | Normal Labor III (Stages And Mechanism) Normal Labor IV (Management Of Labor)                     | // | // |
| 8th  | 2hrs. | Fetal Monitoring In Labor/Fetal comprised, Analgesia & Anesthesia In Labor                        | // | // |
| 9th  | 2hrs. | Abnormal Labor, Breech Presentation & Other Malpresentation                                       | // | // |
| 10th | 2hrs. | Operative Delivery I & II                                                                         | // | // |
| 11th | 2hrs. | Medical complications of Pregnancy I& II                                                          | // | // |

|      |       |                                           |    |    |
|------|-------|-------------------------------------------|----|----|
| 12th | 2hrs. | Medical complications of Pregnancy III&IV | // | // |
| 13th | 2hrs. | Rhesus Isoimmunization Multiple Pregnancy | // | // |
| 14th | 2hrs. | Hypertensive disorders of pregnancy IUGR  | // | // |
| 15th | 2hrs. | Preterm labour I & II                     | // | // |

### 11.Course Evaluation

Multiple choice questions  
quizzes  
Discussion during lecture  
Short questions during lecture

### 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                                  |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <ul style="list-style-type: none"> <li>•Dewhurst's Textbook of Obstetrics Gynaecology, 9th Edition By Keith Edmond</li> <li>•Obstetrics By Ten Teachers, 21th Edition</li> </ul> |
| Main references (sources)                                          |                                                                                                                                                                                  |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                  |
| Electronic References, Websites                                    |                                                                                                                                                                                  |

### 1. Course Name:

Pediatric

### 2. Course Code:

Pedi-30

### 3. Semester / Year:

1<sup>st</sup> semester / 4<sup>th</sup> year

### 4. Description Preparation Date:

11/5/2025

### 5. Available Attendance Forms:

4<sup>th</sup> stage students

### 6. Number of Credit Hours (Total) / Number of Units (Total) :

30

### 7. Course administrator's name (mention all, if more than one name)

|                                     |                                                                                                                                                                                                                                                                                                                                 |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Name:                               |                                                                                                                                                                                                                                                                                                                                 |
| 8. Course Objectives                |                                                                                                                                                                                                                                                                                                                                 |
| Course Objectives                   | The course describes the basic knowledges of pediatric to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the emergent conditions, in a way to participate in optimizing the medical services to the society |
| 9. Teaching and Learning Strategies |                                                                                                                                                                                                                                                                                                                                 |
| Strategy                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                                           |
| 10. Course Structure                |                                                                                                                                                                                                                                                                                                                                 |

| Week | Hours | Unit/Module or Topic Title                             | Teaching Method                                                                          | Assessment Method                                                                                    |
|------|-------|--------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1st  | 2hrs. | <b>PRINCIPLES OF IMMUNIZATION</b>                      | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture |
| 2nd  | 2hrs. | <b>DIET OF THE NORMAL INFANT</b><br>Abnormal Nutrition | //                                                                                       | //                                                                                                   |
| 3rd  | 2hrs. | Growth And Development<br>Rickets and vit d            | //                                                                                       | //                                                                                                   |
| 4th  | 2hrs. | Upper respiratory tract disease<br>Bronchiolitis       | //                                                                                       | //                                                                                                   |
| 5th  | 2hrs. | Lower respiratory disease<br>Cystic fibrosis           | //                                                                                       | //                                                                                                   |
| 6th  | 2hrs. | Allergic disease asthma                                | //                                                                                       | //                                                                                                   |
| 7th  | 2hrs. | Chicken pox<br>Polio virus                             | //                                                                                       | //                                                                                                   |
| 8th  | 2hrs. | German measles<br>Mumps                                | //                                                                                       | //                                                                                                   |
| 9th  | 2hrs. | Herpesviruses 6 and 7<br>whooping cough<br>Pertussis   | //                                                                                       | //                                                                                                   |
| 10th | 2hrs. | Kala azar                                              | //                                                                                       | //                                                                                                   |
| 11th | 2hrs. | <b>Midterm Examination</b>                             | //                                                                                       | //                                                                                                   |

|      |       |                          |    |    |
|------|-------|--------------------------|----|----|
| 12th | 2hrs. | Scarlet fever<br>Tetanus | // | // |
| 13th | 2hrs. | tuberculosis             | // | // |
| 14th | 2hrs. | measles                  | // | // |
| 15th | 2hrs. | Skill Lab                | // | // |

### 11. Course Evaluation

Multiple choice questions  
quizzes  
Discussion during lecture  
Short questions during lecture

### 12. Learning and Teaching Resources

|                                                                       |                                   |
|-----------------------------------------------------------------------|-----------------------------------|
| Required textbooks (curricular books, if any)                         | NELSON TEXTBOOK PEDIATRICS (2016) |
| Main references (sources)                                             |                                   |
| Recommended books and references<br>(scientific journals, reports...) |                                   |
| Electronic References, Websites                                       |                                   |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                |
| Cardiology /cardiovascular surgery                                         |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                |
| Sur.car.11                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                |
| 1 <sup>st</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Course Objectives</b>                                                   | 1.Understand the anatomy & physiology of cardiovascular system.<br>2.Recognize the pathophysiological mechanisms of common cardiovascular diseases.<br>3.Develop diagnostic and treatment strategies for cardiac disorders.<br>4.Interpret diagnostic tools such as ECGs, echocardiograms, and stress tests.<br>5.Understand the pharmacological and non-pharmacological treatment modalities. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Strategy</b>                                                            | •Lectures: Interactive presentations with multimedia support.<br>•Case Discussions: Problem-based learning with real-life case studies.<br>•Practical/Clinical Rotations: Hands-on experience in cardiology wards.                                                                                                                                                                             |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                |

| Week                  | Hours | Unit/Module or Topic Title                                                                        | Teaching Method | Assessment Method |
|-----------------------|-------|---------------------------------------------------------------------------------------------------|-----------------|-------------------|
| 1 <sup>st</sup> Week  | 2     | 1. Cardiac Anatomy & Physiology.<br>2. Investigations to CVS.                                     |                 |                   |
| 2 <sup>nd</sup> Week  | 2     | 3. Normal ECG.<br>4. Abnormal ECG.                                                                |                 |                   |
| 3 <sup>rd</sup> Week  | 2     | 5. Heart Failure.<br>6. Management of Heart Failure.                                              |                 |                   |
| 4 <sup>th</sup> Week  | 2     | 7. Arrhythmia General Principles.<br>8. Atrial Arrhythmias.                                       |                 |                   |
| 5 <sup>th</sup> Week  | 2     | 9. Ventricular arrhythmias.<br>10. Cardiac Arrest.                                                |                 |                   |
| 6 <sup>th</sup> Week  | 2     | 11. Cardiopulmonary Bypass & Its Complications<br>12. Coronary Artery Bypass Surgery              |                 |                   |
| 7 <sup>th</sup> Week  | 2     | 13. Congenital Heart Diseases<br>14. Acquired Heart Diseases                                      |                 |                   |
| 8 <sup>th</sup> Week  | 2     | Midterm Examination                                                                               |                 |                   |
| 9 <sup>th</sup> Week  | 2     | 15. Atherosclerosis.<br>16. Stable coronary artery disease.                                       |                 |                   |
| 10 <sup>th</sup> Week | 2     | 17. Acute coronary syndrome.<br>18. Cardiogenic Shock.                                            |                 |                   |
| 11 <sup>th</sup> Week | 2     | 19. Hypertension.<br>20. Diseases of myocardium.                                                  |                 |                   |
| 12 <sup>th</sup> Week | 2     | 21. Infections of heart.<br>22. Diseases of Pericardium.                                          |                 |                   |
| 13 <sup>th</sup> Week | 2     | 23. Valvular Heart Diseases-1<br>24. Valvular Heart Diseases-2                                    |                 |                   |
| 14 <sup>th</sup> Week | 2     | 25. Pericardial Conditions<br>26. Thoracic Outlet Syndrome                                        |                 |                   |
| 15 <sup>th</sup> Week | 2     | 27. Vascular Diseases: Peripheral Arterial Diseases.<br>28. Vascular Diseases: Diseases Of Aorta. |                 |                   |

### 11. Course Evaluation

1. Continuous Assessment (30%)  
 Quizzes (3%)  
 Case presentations (3%)  
 Midterm exam (24%)  
 2. Final Examination (70%)  
 Written Exam (70%)

### 12. Learning and Teaching Resources

Required textbooks (curricular books, if any)

Davidson's Principles & Practice of Medicine 2 Edition

Main references (sources)

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Respiratory                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 1 <sup>st</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>•Provide foundational and advanced knowledge of pulmonology, including anatomy, physiology, and pathology of the respiratory system.</li> <li>•Develop diagnostic and clinical skills for common respiratory conditions such as asthma, COPD, tuberculosis, and lung cancer.</li> <li>•Foster evidence-based medical practice and critical thinking in pulmonology.</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Strategy</b>                                                            | <ul style="list-style-type: none"> <li>•Knowledge-Based Learning:<br/>Lectures &amp; Interactive Seminars.<br/>Online Modules &amp; Self-Directed Learning.</li> <li>•Clinical-Based Learning:<br/>Bedside Teaching &amp; Ward Rounds.<br/>Case-Based Learning (CBL) &amp; Problem-Based Learning (PBL).</li> </ul>                                                                                                   |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                       |

| Week                  | Hours | ILOs | Unit/Module or Topic Title                                                                                        | Teaching Method                                                                                | Assessment Method |
|-----------------------|-------|------|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------|-------------------|
| 1 <sup>st</sup> week  | 2     |      | 1. Anatomy & physiology of respiratory system<br>2. Investigations of respiratory system                          | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 2 <sup>nd</sup> Week  | 2     |      | 3. pulmonary function test.<br>4. Cardinal manifestations of respiratory disorders 1                              | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 3 <sup>rd</sup> Week  | 2     |      | 5. Cardinal manifestations of respiratory disorders 2<br>6. Asthma 1                                              | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 4 <sup>th</sup> Week  | 2     |      | 7. Asthma Management.<br>8. COPD.                                                                                 | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 5 <sup>th</sup> Week  | 2     |      | 9. Bronchiectasis & cystic fibrosis.<br>10. Pneumonia 1                                                           | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 6 <sup>th</sup> Week  | 2     |      | 11. Pneumonia 2<br>12. Tumor of lung.                                                                             | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 7 <sup>th</sup> Week  | 2     |      | 13. Pneumothorax and its surgical management.<br>14. Haemothorax and its surgical management                      | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 8 <sup>th</sup> Week  | 2     |      | Midterm Examination                                                                                               |                                                                                                |                   |
| 9 <sup>th</sup> Week  | 2     |      | 15. TB 1<br>16. TB 2                                                                                              | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 10 <sup>th</sup> Week | 2     |      | 17. Pulmonary Embolism<br>18. Pulmonary hypertension.                                                             | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 11 <sup>th</sup> Week | 2     |      | 19. Interstitial lung disease 1<br>20. interstitial lung disease 2                                                | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 12 <sup>th</sup> Week | 2     |      | 21. Presentation of lung disease & Investigation of chest pathology<br>22. The mediastinum , disease and tumours. | <ul style="list-style-type: none"> <li>• Lectures</li> <li>• Case-based discussions</li> </ul> |                   |
| 13 <sup>th</sup>      | 2     |      | 23. Diaphragmatic disorders and                                                                                   | <ul style="list-style-type: none"> <li>• Lectures</li> </ul>                                   |                   |

|                          |          |  |                                                                       |                                                                                            |  |
|--------------------------|----------|--|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------|--|
| Week                     |          |  | their surgical aspects<br>24. Intrabronchial Foreign bodies           | <ul style="list-style-type: none"> <li>Case-based discussions</li> </ul>                   |  |
| 14 <sup>th</sup><br>Week | <b>2</b> |  | 25. Lung Abscess<br>26. Pulmonary Hydatid disease                     | <ul style="list-style-type: none"> <li>Lectures</li> <li>Case-based discussions</li> </ul> |  |
| 15 <sup>th</sup><br>Week | <b>2</b> |  | 27. Chest Injuries.<br>28. Malignant lung tumour and their management | <ul style="list-style-type: none"> <li>Lectures</li> <li>Case-based discussions</li> </ul> |  |

### 11.Course Evaluation

-Formative Assessments (Continuous Evaluation):  
 Quizzes & Online MCQs (weekly/monthly).  
 Case-Based Presentations & Group Discussions  
 -Summative Assessments (Final Evaluation):  
 Written Examination:  
 Multiple-choice questions (MCQs) & short-answer questions (SAQs).  
 Problem-solving case scenarios

### 12. Learning and Teaching Resources

|                                                                    |                                                           |
|--------------------------------------------------------------------|-----------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Davidson's Principles & Practice of Medicine 24th edition |
| Main references (sources)                                          |                                                           |
| Recommended books and references (scientific journals, reports...) |                                                           |
| Electronic References, Websites                                    |                                                           |

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                                                                                                        |
| Nephrology                                                          |                                                                                                                                                                                                                                                                                                                                                                                        |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                                                                                                        |
| Sur.Neph.8                                                          |                                                                                                                                                                                                                                                                                                                                                                                        |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                                                                                                        |
| 1 <sup>st</sup> semester / 4 <sup>th</sup> year                     |                                                                                                                                                                                                                                                                                                                                                                                        |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                                                                                                        |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                                                                                                        |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                                                                                                        |
| 4 <sup>th</sup> stage students                                      |                                                                                                                                                                                                                                                                                                                                                                                        |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                                                                                                        |
| 45                                                                  |                                                                                                                                                                                                                                                                                                                                                                                        |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                                                                                                        |
| Name:                                                               |                                                                                                                                                                                                                                                                                                                                                                                        |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Course Objectives</b>                                            | The course describes the basic knowledges of urology and nephrology to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including , stone disease, urinary tract infections and emergent conditions, in a way to participate in optimizing the medical services to the society |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Strategy</b>                                                     | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                                                                                                  |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                                                                                                                                                        |

| Week | Hours | Unit/Module or Topic Title                                                                                                                | Teaching Method                                                                          | Assessment Method                                                                                      |
|------|-------|-------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 1    | 3     | 1.Functional Anatomy & Physiology 1.<br>2.Functional Anatomy & Physiology 2.<br>3.Investigations of Renal System: Biochemical.            | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture . |
| 2    | 3     | 4.Investigations of Renal System: Radiological & Biopsy.<br>5.Urinary Tract Imaging<br>6,Presenting Problems In Renal Diseases 1.         |                                                                                          |                                                                                                        |
| 3    | 3     | 7.Presenting Problems In Renal Diseases 2.<br>8.Urinary Tract Infection.<br>9.Specific Urinary Tract Infection.                           |                                                                                          |                                                                                                        |
| 4    | 3     | 10.Acute Kidney Injury.<br>11.Chronic Kidney Injury: Causes & Clinical Manifestations.<br>12.Obstructive Uropathy                         |                                                                                          |                                                                                                        |
| 5    | 3     | 13.Chronic Kidney Injury: Main Treatment Options.<br>14.Chronic Kidney Injury: Complications<br>15.Cystic Diseases Of Kidney.             |                                                                                          |                                                                                                        |
| 6    | 3     | 16.Renal Replacement Therapy.<br>17.Renal Replacement Therapy complications<br>18.Renal Vascular Diseases.                                |                                                                                          |                                                                                                        |
| 7    | 3     | 19.Glomerular Diseases.<br>20.Nephrotic Syndrome.<br>21.Nephritic Syndrome.                                                               |                                                                                          |                                                                                                        |
| 8    | 3     | 22.Glomerular Diseases: Rapidly Progressive GN.<br>23.Tubulointerstitial Diseases<br>24.Congenital Anomalies Of Kidney , Ureter & Bladder |                                                                                          |                                                                                                        |
| 9    | 3     | 25.Vesicoureteral reflux<br>26.Congenital Anomalies Of external genitalia<br>27.Renal Stone Diseases                                      |                                                                                          |                                                                                                        |
| 10   | 3     | 28.Ureteral Stone Diseases                                                                                                                |                                                                                          |                                                                                                        |

|    |   |                                                                                                            |  |  |
|----|---|------------------------------------------------------------------------------------------------------------|--|--|
|    |   | 29.Vesical and urethral stones<br>30.Upper urinary tract trauma                                            |  |  |
| 11 | 3 | 31.Lower urinary tract trauma<br>32.Benign Prostatic Hyperplasia<br>33.Carcinoma Of Prostate 1             |  |  |
| 12 | 3 | 34.Carcinoma Of Prostate 2<br>35.Tumors Of The Kidney And Ureter 1<br>36.Tumors Of The Kidney And Ureter 2 |  |  |
| 13 | 3 | 37.Tumors Of The Urinary Bladder 38.Benign Disorders Of The Testicle<br>39.Tumors Of The Testis            |  |  |
| 14 | 3 | 40.Urinary Incontinence<br>41.Neurogenic Bladder disease 1<br>42.Neurogenic Bladder disease 2              |  |  |
| 15 | 3 | 43.Sexual Dysfunction<br>44.Male Infertility<br>45. Surgical Management of Male infertility                |  |  |

| 11.Course Evaluation                                                          |                                                                                                                                                                                           |
|-------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Multiple choice question the most appropriate answer (case scenarios) quizzes |                                                                                                                                                                                           |
| 12. Learning and Teaching Resources                                           |                                                                                                                                                                                           |
| Required textbooks (curricular books, if any)                                 | 1. Baily and Love's Textbook / Short Practice Surgery<br>2. Smith's General Urology<br>3. Harrison's Principles of Internal Medicine<br>4. Davidson's Principles and Practice of Medicine |
| Main references (sources)                                                     |                                                                                                                                                                                           |
| Recommended books and references (scientific journals, reports...)            |                                                                                                                                                                                           |
| Electronic References, Websites                                               |                                                                                                                                                                                           |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Community Medicine                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| COMCom-41                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 1 <sup>st</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 90                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Course Objectives</b>                                                   | This course provides the student with basic knowledge and skills in community and family medicine (primary health care) epidemiology                                                                                                                                                                                                                                                                                                                                                       |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Strategy</b>                                                            | 1. Delivering theoretical lectures using available presentation techniques (data show projectors and smart board).<br>2. Learning the correct scientific methods for collecting clinical samples, conducting data for scientific research<br>3. Developing students' skills through mental questions, answers, and special tests in practical session<br>4. The student is required to write scientific topics related to the use of online research<br>5. E learning and google classroom |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |

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|  |
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| Week                                                        | Hours | Required learning outcome                                                                                                                            | Unit name/topic    | Teaching method    | Evaluation method |
|-------------------------------------------------------------|-------|------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|--------------------|-------------------|
| 1. Introduction of epidemiology                             | 3     | Predict trends in disease occurrences, describe disease models, risk, and contributing, assess an epidemic, formulate disease preventive strategies. | Basic epidemiology | Different methods  | Quizzes           |
| 2. Ratio, proportion & rate                                 | 2     |                                                                                                                                                      |                    | Classic lecture    | Reports           |
| 3. Population pyramids                                      | 1     |                                                                                                                                                      |                    |                    | Discussion        |
| 4. Dynamics of disease transmission                         | 1     |                                                                                                                                                      |                    | Group discussion   | Mid term exam     |
| 5. Outbreak/ epidemic / pandemic                            | 1     |                                                                                                                                                      |                    | Seminar            | Final term exam   |
| 6. Investigation of an outbreak/ epidemic                   | 2     |                                                                                                                                                      |                    | Practical sessions |                   |
| 7. Screening test                                           | 2     |                                                                                                                                                      |                    |                    |                   |
| 8. Measures of disease frequency (Incidence and prevalence) | 3     |                                                                                                                                                      |                    |                    |                   |
| 9. Measures mortality rate/ ratio                           | 3     |                                                                                                                                                      |                    |                    |                   |
| 10. Judgment of cause and effect relationship.              | 2     |                                                                                                                                                      |                    |                    |                   |
| 11. Risk assessment                                         | 1     |                                                                                                                                                      |                    |                    |                   |
| 12. Concept of PHC                                          | 1     |                                                                                                                                                      |                    |                    |                   |
| 13. MDG and SDG                                             | 2     |                                                                                                                                                      |                    |                    |                   |
| 14. IMCI                                                    | 1     |                                                                                                                                                      |                    |                    |                   |
| 15. Expanded program on immunization (EPI)                  | 1     |                                                                                                                                                      |                    |                    |                   |
| 16. Maternal & Child health                                 | 1     |                                                                                                                                                      |                    |                    |                   |
| 17. Breast feeding                                          | 1     |                                                                                                                                                      |                    |                    |                   |
| 18. Child growth                                            | 1     |                                                                                                                                                      |                    |                    |                   |

| 11.Course Evaluation                                                                                                                                             |                                                                                               |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------|
| 1.Theoretical exams (mid-year + end of year).<br>2.Practical exam: (oral exam, skill exam, practical information exam).<br>3.Reports.<br>4.Seminars by students. |                                                                                               |
| 12. Learning and Teaching Resources                                                                                                                              |                                                                                               |
| Required textbooks (curricular books, if any)                                                                                                                    | Text book of Public Health Medicine for Tropics.<br>Epidemiology. Fourth edition. Leon Gordis |
| Main references (sources)                                                                                                                                        |                                                                                               |
| Recommended books and references (scientific journals, reports...)                                                                                               |                                                                                               |
| Electronic References, Websites                                                                                                                                  |                                                                                               |

| المؤسسة التعليمية/ الكلية       | جامعة الفلوجة \ كلية الطب                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| القسم الذي يقدم المادة          | قسم علم الامراض                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| اسم البرنامج الأكاديمي          | الطب العدلي                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| نماذج الحضور المتوفرة           | الزامي                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| العام الدراسي \ المرحلة         | 2025\2024<br>المرحلة الرابعة                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| الفصل الدراسي \ السنة           | الفصل الدراسي الأول 2025\2024                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| ساعات الفصل الدراسي الكاملة     | 30 ساعة نظري + 45 ساعة عملي                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| تاريخ بداية الفصل الدراسي الأول | 11/5/2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| الأهداف العامة للفصل الدراسي    | تنمية معارف ومهارات وسلوك الطالب فيما يتعلق بالتعرف على أشكال العلامات السريرية لمختلف أنواع الجروح وكيفية كتابة تقرير الطب الشرعي لها، وكذلك تشخيص حالات الوفاة وارتباطها بالعنف أو الجريمة. بالإضافة إلى معرفة أهمية الطب الشرعي لمعظم الحوادث الطبيعية وغير الطبيعية مثل الصعق الكهربائي والاختناق والاعتداء الجنسي. إلى جانب النقاط المذكورة أعلاه، هناك بعداً سميّاً إضافيّاً حيث يتم شرح وتوضيح تأثيرات المواد الكيميائية والمواد السامة المختلفة من الجوانب السريرية والطبية القانونية |

| هيكل الفصل الدراسي |                            |                        |                      |                                                                          |                                                                                                   |
|--------------------|----------------------------|------------------------|----------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| الأسبوع            | الساعات                    | مخرجات التعلم المطلوبة | اسم الوحدة/الموضوع   | طرق التدريس                                                              | طرق التقييم                                                                                       |
| الأول              | ساعتين نظري + 3 ساعات عملي |                        | مقدمة عن الطب العدلي | محاضرات نظرية باستخدام أجهزة العرض والسميرة الذكية + تجارب ومهارات عملية | أسئلة شفوية في نهاية المحاضرة النظرية ومناقشة مع الطلاب حول المحاضرة + كتابة تقرير عن نتائج العمل |
| الثاني             | ساعتين نظري + 3 ساعات عملي |                        | تعريف                |                                                                          |                                                                                                   |
| الثالث             | ساعتين نظري + 3 ساعات عملي |                        | الموت                |                                                                          |                                                                                                   |

|  |  |                                       |  |                                  |               |
|--|--|---------------------------------------|--|----------------------------------|---------------|
|  |  | الجروح                                |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | الرابع        |
|  |  | إصابات الرأس<br>والجسم                |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | الخامس        |
|  |  | الطب العدلي وتقارير<br>الطب العدلي    |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | السادس        |
|  |  | تقدير العمر                           |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | السابع        |
|  |  | الإصابات الحرارية                     |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | الثامن        |
|  |  | الإصابات الكهربائية                   |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | التاسع        |
|  |  | الموت المفاجئ                         |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | العاشر        |
|  |  | الاعتداءات الجنسية                    |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | الحادي<br>عشر |
|  |  | الاختناق                              |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | الثاني<br>عشر |
|  |  | طب الأطفال العدلي<br>والإساءة للأطفال |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | الثالث<br>عشر |
|  |  | طرائق التشريح                         |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | الرابع<br>عشر |
|  |  | مراجعة للفصل الأول                    |  | ساعتين نظري<br>+ ٣ ساعات<br>عملي | الخامس<br>عشر |

|                                                              |                                                                                                                                           |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|
| المصادر والمتطلبات :                                         |                                                                                                                                           |
| الكتب المطلوبة                                               |                                                                                                                                           |
| المصدر الأساسي                                               | الوجيز في الطب العدلي وصفي محمد علي                                                                                                       |
| الكتب والمراجع الموصى بها (المجلات العلمية والتقارير وغيرها) | <ul style="list-style-type: none"> <li>AND PATHOLOGY</li> <li>Casarett &amp; Doull's Toxicology: The Basic Science of Poisons.</li> </ul> |
| المراجع الإلكترونية والمواقع الإلكترونية وغيرها              | Joseph prahlow : atlas of forensic pathology and forensic pathology                                                                       |

**4<sup>th</sup> year / 2<sup>nd</sup> semester**  
**Course Description Form**

|                                                                            |                                                                                                                                                                                                                                                                                                                                  |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                  |
| Obstetrics &gynecology                                                     |                                                                                                                                                                                                                                                                                                                                  |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                  |
| Gyne.11                                                                    |                                                                                                                                                                                                                                                                                                                                  |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                  |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                  |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                  |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                  |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                  |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                  |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                  |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                                  |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                  |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                  |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                  |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of obstetrics to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the emergent conditions, in a way to participate in optimizing the medical services to the society |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                  |
| <b>Strategy</b>                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching<br>Assessment methods                                                                                                                                                                      |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                  |

| Week | Hours | Unit/Module or Topic Title | Teaching Method                                                                          | Assessment Method                                                                                    |
|------|-------|----------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1st  | 1hr   | Obstetric Emergencies I    | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture |
| 2nd  | 1hr   | Obstetric Emergencies II   | //                                                                                       | //                                                                                                   |

|      |     |                                                             |    |    |
|------|-----|-------------------------------------------------------------|----|----|
| 3rd  | 1hr | The Puerperium I                                            | // | // |
| 4th  | 1hr | The Puerperium II                                           | // | // |
| 5th  | 1hr | Post term pregnancy                                         | // | // |
| 6th  | 1hr | Antepartum Hemorrhage I                                     | // | // |
| 7th  | 1hr | Antepartum Hemorrhage II                                    | // | // |
| 8th  | 1hr | Prenatal Diagnosis                                          | // | // |
| 9th  | 1hr | Obstetrical Complication, VTE& Thrombophilia                | // | // |
| 10th | 1hr | Oligo & Polyhydramnios<br>Smoking & Alcoholism In Pregnancy | // | // |
| 11th | 1hr | induction of labour                                         | // | // |
| 12th | 1hr | Perinatal Infection I                                       | // | // |
| 13th | 1hr | Perinatal Infection II                                      | // | // |
| 14th | 1hr | The neonate                                                 | // | // |
| 15th | 1hr | Psychiatric Disorder in Puerperium                          | // | // |

### 11.Course Evaluation

Multiple choice questions  
quizzes  
Discussion during lecture  
Short questions during lecture

### 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                                  |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <ul style="list-style-type: none"> <li>•Dewhurst's Textbook of Obstetrics Gynaecology, 9th Edition By Keith Edmond</li> <li>•Obstetrics By Ten Teachers, 21th Edition</li> </ul> |
| Main references (sources)                                          |                                                                                                                                                                                  |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                  |
| Electronic References, Websites                                    |                                                                                                                                                                                  |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                      |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                      |
| Pediatrics                                                                 |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                      |
| Pedi-14                                                                    |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                      |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                      |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                      |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                      |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                      |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of pediatrics to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the GIT, neonatal, genetics, and nephrology emergent conditions, in a way to participate in optimizing the medical services to the concerning diseases |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                      |
| <b>Strategy</b>                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                                                                                                |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                      |

| Week            | Hours | Unit/Module or Topic Title                                                                                                                          | Teaching Method                                                                          | Assessment Method                                                                                    |
|-----------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|                 |       |                                                                                                                                                     | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture |
| 1 <sup>st</sup> | 2hrs. | -Acute gastroenteritis in children, etiology,<br>-Mechanism of diarrhea<br>Dehydration, types of dehydration<br>-Treatment of acute gastroenteritis | //                                                                                       | //                                                                                                   |

|                 |        |                                                                                                                                                                                                                                                                                                                                                                      |    |    |
|-----------------|--------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
| 2 <sup>nd</sup> | 2hrs   | <ul style="list-style-type: none"> <li>-Calculation of fluid deficit and maintenance</li> <li>-Complications of diarrhea</li> <li>-Chronic diarrhea</li> <li>- Pathophysiology, causes, celiac disease, - Malabsorption syndromes</li> </ul>                                                                                                                         | // | // |
| 3 <sup>rd</sup> | 2hrs . | <ul style="list-style-type: none"> <li>-Abdominal pain</li> <li>-Abdominal migraine</li> </ul>                                                                                                                                                                                                                                                                       | // | // |
| 4 <sup>th</sup> | 2hrs   | <ul style="list-style-type: none"> <li>-Classification of newborn baby</li> <li>-Assessment APGAR score.</li> <li>-Neonatal Reflexes</li> <li>-Common cutaneous lesions.</li> <li>- Causes of low-birth-weight baby</li> <li>- Preterm baby</li> <li>-Small for-date baby</li> </ul>                                                                                 | // | // |
| 5 <sup>th</sup> | 2hrs   | <ul style="list-style-type: none"> <li>-Respiratory distress syndrome</li> <li>- Differential diagnosis of RDS in newborn baby</li> <li>- Bronchopulmonary dysplasia</li> <li>- Retinopathy of prematurity</li> <li>-Transient tachypnea of newborn baby</li> <li>-Meconium aspiration syndrome</li> <li>-Congenital diaphragmatic hernia</li> <li>-Apnea</li> </ul> | // | // |
| 6 <sup>th</sup> | 2hrs.  | <ul style="list-style-type: none"> <li>- Hypoglycemia</li> <li>- Infant of diabetic mothers</li> <li>- Hypocalcemia</li> <li>- Neonatal seizures</li> </ul>                                                                                                                                                                                                          | // | // |
| 7 <sup>th</sup> | 2hrs.  | <ul style="list-style-type: none"> <li>- Neonatal sepsis</li> <li>-TORCH infection</li> <li>-Examination of the newborn baby.</li> <li>- Classification of newborns</li> <li>- Examination of newborns</li> </ul>                                                                                                                                                    | // | // |
| 8 <sup>th</sup> | 2hrs.  | <ul style="list-style-type: none"> <li>-Birth injuries</li> <li>-Birth asphyxia</li> <li>-Hemorrhagic</li> </ul>                                                                                                                                                                                                                                                     | // | // |

|                  |       |                                                                                                                                                                                                                                                   |    |    |
|------------------|-------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
|                  |       | disease of newborn                                                                                                                                                                                                                                |    |    |
| 9 <sup>th</sup>  | 2hrs  | <ul style="list-style-type: none"> <li>- Jaundice, pathophysiology of neonatal jaundice.</li> <li>- differentiate pathologic from physiologic jaundice.</li> <li>- how to manage pathologic jaundice.</li> </ul> hemolytic disease of the newborn | // | // |
| 10 <sup>th</sup> | 2hrs. | ABO incompatibility<br>- RH incompatibility<br><b>Midterm Examination</b>                                                                                                                                                                         | // | // |
| 11 <sup>th</sup> | 2hrs. | <ul style="list-style-type: none"> <li>- Proteinuria</li> <li>- Nephrotic syndrome</li> <li>-Management of nephrotic syndrome</li> </ul>                                                                                                          | // | // |
| 12 <sup>th</sup> | 2hrs. | -Poststreptococcal Glomerulonephritis)<br>- Hemolytic-uremic syndrome -<br>- Henoch-schonlein purpura                                                                                                                                             | // | // |
| 13 <sup>th</sup> | 2hrs  | Urinary tract infections<br>- Vesicoureteral Reflux                                                                                                                                                                                               | // | // |
| 14 <sup>th</sup> | 2hrs  | - Acute kidney injury<br>- Chronic kidney disease<br>- RTA                                                                                                                                                                                        | // | // |
| 15 <sup>th</sup> | 2hrs  | Pattern of inheritance<br>- Chromosomal<br><br>Acute kidney injury disorders<br>- Down syndrome<br>- trisomy 18<br>- trisomy 13<br>- turner syndrome                                                                                              |    |    |

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|--------------------------------------------------------------------|------------------------------------------------|
| <b>11.Course Evaluation</b>                                        |                                                |
| The most appropriate answer (case scenarios) quizzes               |                                                |
| <b>12. Learning and Teaching Resources</b>                         |                                                |
| Required textbooks (curricular books, if any)                      | Nelson Text Book of pediatrics                 |
| Main references (sources)                                          | workshops, periodicals, IT software, websites) |
| Recommended books and references (scientific journals, reports...) |                                                |
| Electronic References, Websites                                    |                                                |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| GASTROENTOROLOGY                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 75                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Course Objectives</b>                                                   | <p>1–Understand GIT Anatomy &amp; Physiology Gain a solid foundation in the structure and function of the gastrointestinal system relevant to surgery</p> <p>2–Recognize Common GIT Disorders Learn to identify and differentiate between common surgical conditions like appendicitis, peptic ulcer disease, bowel obstruction, and colorectal cancer</p> <p>3–Develop Diagnostic Skills Understand how to assess patients, interpret imaging (X-ray, CT, endoscopy), and recognize indications for surgical intervention</p> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Strategy</b>                                                            | This course is given as five lectures per week for 1 hour each. The lectures are interactive and composed of PowerPoint presentations, images, and videos to illustrate                                                                                                                                                                                                                                                                                                                                                        |

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|  | concepts and procedures. Case-based learning with pre- and post-questions. On resources such as online meetings, social media groups and e-books can supplement traditional lectures and provide additional opportunities for learning as well as various student tasks to implement self-directed learning. |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

## 10. Course Structure

| Week | Hour | Unit name/topic                                                                                                                                                                                | Teaching Method                                                                          | Assessment Method                                                                                      |
|------|------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| 1    | 5    | -Functional Anatomy of GIT.<br>-Physiology Of GIT.<br>-Functional Anatomy of Liver.<br>-Physiology and investigation of G.I.T of Liver.                                                        | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture . |
| 2    | 5    | -Diseases Of Esophagus<br>-The clinical features of esophageal diseases.<br>-Pathology of Esophagus<br>- Surgical management of Esophagus                                                      |                                                                                          |                                                                                                        |
| 3    | 5    | -Diseases Of Stomach<br>- Surgical management of Stomach<br>-Diseases Of Duodenum<br>- Surgical management of Duodenum                                                                         |                                                                                          |                                                                                                        |
| 4    | 5    | -Peptic ulcer disease and upper GIT bleeding<br>-Gastric cancer<br>-Basic surgical techniques<br>-Open and laparoscopic & the management of postoperative problems                             |                                                                                          |                                                                                                        |
| 5    | 5    | -Diseases Of Small Intestine<br>- Surgical management of Small Intestine<br>-Benign and malignant Of Small Intestine<br>- Surgical management of Benign and malignant tumor Of Small Intestine |                                                                                          |                                                                                                        |
| 6    | 5    | -Inflammatory Bowel Diseases<br>-Pathophysiology of Inflammatory Bowel Diseases<br>-Diagnosis of Inflammatory Bowel Diseases                                                                   | GIT                                                                                      |                                                                                                        |

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|----|---|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|
|    |   | -Inflammatory Bowel Diseases Treatment.                                                                                                                                                                                                                                                                                  |     |  |
| 7  | 5 | -Irritable Bowel Syndrome.<br>-Diseases Of Colon & Rectum<br>-Medical management of Irritable Bowel Syndrome.<br>- Benign lesions, malignant diseases of large bowel                                                                                                                                                     | GIT |  |
| 8  | 5 | - Anatomy physiology of large bowel<br>-The cardinal features on history and examination of intestinal obstruction<br>-The causes of small and large bowel obstruction.<br>-The indications for surgery and other treatment options in bowel obstruction                                                                 | GIT |  |
| 9  | 5 | -The clinical signs and differential diagnoses of appendicitis -The investigation of suspected appendicitis<br>-The spectrum of mesenteric and retroperitoneal conditions<br>- Surgical management of suspected appendicitis                                                                                             | GIT |  |
| 10 |   | <b>Midterm Examination</b>                                                                                                                                                                                                                                                                                               | GIT |  |
| 11 | 5 | -The pathology, clinical presentation of diseases that affect the anus and anal canal<br>-Investigation of diseases that affect the anus and anal canal<br>- Differential diagnosis of anal diseases treatment of diseases that affect the anus and anal canal<br>-Hemorrhoids & its surgical treatment and complication | GIT |  |
| 12 | 5 | -The investigation of liver disease<br>-The management of liver trauma<br>-Liver benign disease and malignant<br>- Surgical management of liver                                                                                                                                                                          | GIT |  |

|    |   |                                                                                                                                                                              |     |  |
|----|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|--|
| 13 | 5 | -Cholestatic Liver Diseases<br>-Pathophysiology of gallstones<br>-Management of gallstones<br>-Malignant disease of the gallbladder and bile ducts                           | GIT |  |
| 14 | 5 | -Investigations of the pancreas<br>-Congenital abnormalities of the pancreas.<br>-Assessment and management of pancreatitis<br>-Diagnosis and treatment of pancreatic cancer | GIT |  |
| 15 | 5 | -Anatomy of spleen<br>- Physiology of spleen<br>-The common pathologies involving the spleen<br>-The principles and potential complications of splenectomy                   | GIT |  |

### 11.Course Evaluation

Multiple choice question the most appropriate answer (case scenarios) quizzes

### 12. Learning and Teaching Resources

|                                                                    |                                                     |
|--------------------------------------------------------------------|-----------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Baily and Love's Textbook / Short Practice Surgery. |
| Main references (sources)                                          |                                                     |
| Recommended books and references (scientific journals, reports...) |                                                     |
| Electronic References, Websites                                    |                                                     |

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|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                         |
| Endocrinology                                                              |                                                                                                                                                                                                         |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                         |
| Endo.3                                                                     |                                                                                                                                                                                                         |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                         |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                         |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                         |
| 11/5/2025                                                                  |                                                                                                                                                                                                         |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                         |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                         |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                         |
| 30                                                                         |                                                                                                                                                                                                         |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                         |
| Name:                                                                      |                                                                                                                                                                                                         |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                         |
| <b>Course Objectives</b>                                                   | 1.Understanding Endocrine Physiology and Pathophysiology.<br>2.Identifying Endocrine Disorders.<br>3.Mastering Clinical Assessment and Diagnosis.<br>4.Developing Management Strategies.                |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                         |
| <b>Strategy</b>                                                            | •Traditional PowerPoint lectures on endocrine physiology and diseases.<br>•Case-based discussions to highlight clinical relevance.<br>•Use of question-and-answer (Q&A) sessions to reinforce concepts. |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                         |

| Week   | Hour<br>s | Unit/Module or<br>Topic Title                                                                                                                       | Teaching<br>Method                       | Assessment<br>Method     |
|--------|-----------|-----------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------|
| First  | 2         | 1. Pituitary diseases: Anatomy, physiology & presenting features of pituitary diseases.<br>2. Pituitary diseases: Prolactinoma, & Craniopharyngioma | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Second | 2         | 3.Pituitary diseases: Acromegaly & Diabetes Insipidus.<br>4. Thyroid diseases: Anatomy, physiology &                                                | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |

|         |   |                                                                                                                                                                                             |                                          |                          |
|---------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------|
|         |   | presenting features of Thyroid diseases.                                                                                                                                                    |                                          |                          |
| Third   | 2 | <b>5.</b> Thyroid diseases: Hyperthyroidism.<br><b>6.</b> Thyroid diseases: Hypothyroidism.                                                                                                 | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Fourth  | 2 | <b>7.</b> Parathyroid gland diseases: Anatomy, physiology & presenting features of parathyroid diseases.<br><b>8.</b> Parathyroid gland diseases: Hyperparathyroidism & Hypoparathyroidism. | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Fifth   | 2 | <b>9.</b> Adrenal gland diseases: Anatomy, physiology & presenting features of adrenal gland diseases.<br><b>10.</b> Adrenal gland diseases: Cushing syndrome.                              | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Sixth   | 2 | <b>11.</b> Investigations For Thyroid Swellings And Their Management<br><b>12.</b> Thyrotoxicosis And Thyroid Failure                                                                       | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Seventh | 2 | <b>13.</b> Adrenal gland diseases: Hyper- & Hypoaldosteronism.<br><b>14.</b> Complications Of Thyroid And Parathyroid Surgery                                                               | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Eighth  | 2 | <b>Midterm Examination</b>                                                                                                                                                                  |                                          |                          |
| Ninth   | 2 | <b>15.</b> DM: Anatomy, physiology & presenting features of Exocrine pancreatic diseases.                                                                                                   | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |

|            |   |                                                                                                     |                                          |                          |
|------------|---|-----------------------------------------------------------------------------------------------------|------------------------------------------|--------------------------|
|            |   | 16. Aetiology & Pathogenesis Of DM.                                                                 |                                          |                          |
| Tenth      | 2 | 17. Investigation & diagnosis of DM<br>18. Presenting problems in DM 1.                             | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Eleventh   | 2 | 19. Presenting problems in DM 2.<br>20. Management of DM.                                           | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Twelfth    | 2 | 21. Acute Complications of DM.<br>22. Chronic Complications of DM.                                  | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Thirteenth | 2 | 23. Insulin Therapy.<br>24. Insulin Pumps.                                                          | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Fourteenth | 2 | 25. Pheochromocytoma & Congenital adrenal hyperplasia.<br>26. Benign Adrenal Gland Disorders        | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |
| Fifteenth  | 2 | 27. Malignant Adrenal Gland Disorders<br>28. The Role Of Surgery In The Management Of Adrenal Gland | *PowerPoint lectures<br>*Case Discussion | *MCQ<br>*Essay Questions |

|                                                                    |                                                        |
|--------------------------------------------------------------------|--------------------------------------------------------|
| <b>11.Course Evaluation</b>                                        |                                                        |
| 1.Essay Questions,<br>2.MCQ clinical scenarios.                    |                                                        |
| <b>12. Learning and Teaching Resources</b>                         |                                                        |
| Required textbooks (curricular books, if any)                      | Davidson's Principles & Practice of Medicine 2 Edition |
| Main references (sources)                                          |                                                        |
| Recommended books and references (scientific journals, reports...) |                                                        |
| Electronic References, Websites                                    |                                                        |

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|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                           |
| Behavioral sciences                                                        |                                                                                                                           |
| <b>2. Course Code:</b>                                                     |                                                                                                                           |
|                                                                            |                                                                                                                           |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                           |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                           |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                           |
| 11/5/2025                                                                  |                                                                                                                           |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                           |
| 4 <sup>th</sup> stage students                                             |                                                                                                                           |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                           |
| 15                                                                         |                                                                                                                           |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                           |
| Name:                                                                      |                                                                                                                           |
|                                                                            |                                                                                                                           |
| <b>8. Course Objectives</b>                                                |                                                                                                                           |
| <b>Course Objectives</b>                                                   | This module deals with behavioral science as it forms the basis of the psychiatry module that is taught in the 5th grade. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                           |
| <b>Strategy</b>                                                            |                                                                                                                           |
| <b>10. Course Structure</b>                                                |                                                                                                                           |

| Week | Hours | Unit/Module or Topic Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Teaching Method      | Assessment Method |
|------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-------------------|
| 1    | 1     | <b>1.Neurotransmitters in the brain</b><br>Neurotransmitter and synthesis with its function                                                                                                                                                                                                                                                                                                                                                                                                                                                | Large group lectures |                   |
| 2    | 1     | <b>2.Most important parts of the brain affect the behavior 1</b><br>Each part of brain and function with what occur if damage on behavior                                                                                                                                                                                                                                                                                                                                                                                                  | Large group lectures |                   |
| 3    | 1     | <b>3.Most important parts of the brain affect the behavior 2</b><br>Each part of brain and function with what occur if damage on behavior                                                                                                                                                                                                                                                                                                                                                                                                  | Large group lectures |                   |
| 4    | 1     | <b>4.memory</b><br>Mechanism of store information and types of memory                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Large group lectures |                   |
| 5    | 1     | <b>5.emotion 1</b><br>Definition<br>Key Elements<br>Theories                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Large group lectures |                   |
| 6    | 1     | <b>6.emotion 2</b><br>Types<br>Emotions vs. Feelings                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Large group lectures |                   |
| 7    | 1     | <b>7.motivation</b><br>Definition, measurement, and semantic field<br>Components and stages                                                                                                                                                                                                                                                                                                                                                                                                                                                | Large group lectures |                   |
| 8    |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                      |                   |
| 9    | 1     | <b>9.personality</b><br>How personality develops.1<br>The<br>2.nature and definition of personality<br>3.Personality variations among individuals<br>4.The influence of personality on thoughts, feelings, and behaviors<br>5.Patterns of thought, emotion, and behavior that make individuals unique                                                                                                                                                                                                                                      | Large group lectures |                   |
| 10   | 1     | <b>10.intelligence</b><br>1.Refers to the mental capacity to learn from experiences, adapt to new situations, understand abstract concepts, and manipulate one's environment<br>2.Includes skills such as problem-solving, critical thinking, and understanding complex ideas<br>3.No standard definition exists, but it can encompass a range of aptitudes, skills, and talents<br>4.IQ (intelligence quotient) is widely used to assess general intelligence<br>5.Other views suggest multiple different types of intelligence may exist | Large group lectures |                   |

|    |   |                                                                                                                                                                                       |                      |  |
|----|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|--|
| 11 | 1 | <b>11.sleep</b><br>Why Is Sleep Important?<br>Why do we sleep?<br>How much sleep do I need?<br>What devices can help me sleep?                                                        | Large group lectures |  |
| 12 | 1 | <b>12.perception</b><br>1.What Is Perception?<br>2.Types of Perception<br>3.How Perception Works                                                                                      | Large group lectures |  |
| 13 | 1 | <b>13.cognitive and moral development</b><br>1.What Is Moral Development, exactly?<br>2.How Kohlberg Developed His Theory<br>3.Stages of Moral Development                            | Large group lectures |  |
| 14 | 1 | <b>14.illness behavior</b><br>1.The Multifaceted Influences on Illness Behavior<br>2.The Spectrum of Illness Behavior<br>3.The Ripple Effect: How Illness Behavior Impacts Healthcare | Large group lectures |  |
| 15 | 1 | <b>15.learning</b><br>History<br>Psychologists and learning theorists<br>Psychology of learning theories                                                                              | Large group lectures |  |

| 11.Course Evaluation                                               |                                                                                         |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| Written exams (single-choice questions)                            |                                                                                         |
| 12. Learning and Teaching Resources                                |                                                                                         |
| Required textbooks (curricular books, if any)                      | Hilgard textbook for psychology, Kaplan & Sadock for Psychiatry and Behavioral Sciences |
| Main references (sources)                                          |                                                                                         |
| Recommended books and references (scientific journals, reports...) |                                                                                         |
| Electronic References, Websites                                    |                                                                                         |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Community Medicine                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| COMCom-41                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 45                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Course Objectives</b>                                                   | This course provides the student with basic knowledge and skills in community and family medicine/Communicable and non communicable disease with basic module for social medicine                                                                                                                                                                                                                                                                                                                                                 |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <b>Strategy</b>                                                            | 1.Delivering theoretical lectures using available presentation techniques (data sheets, projectors and smart board).<br>2.Learning the correct scientific methods for collecting clinical samples, conducting data analysis for scientific research<br>3.Developing students' skills through mental questions, answers, and special tests during practical session<br>4.The student is required to write scientific topics related to the use of online research<br>5. E learning and google classroom<br>6. Seminars of students |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

| Week                                         | Hours | Required learning outcome              | Unit name/topic            | Teaching method    | Evaluation method |
|----------------------------------------------|-------|----------------------------------------|----------------------------|--------------------|-------------------|
| 1. <b>Introduction of infectious disease</b> | 1     |                                        | Basic epidemiology         | Different methods  |                   |
| 2. Measles                                   | 1     |                                        | For prevention and control | Classic lecture    | Quizes            |
| 3. Mumps                                     | 1     | Predict trends in disease occurrences, |                            | Group discussion   | Reports           |
| 4. Rubella                                   | 2     | describe disease models,               |                            | Seminar            | Discussion        |
| 5. Tetanus                                   | 2     |                                        |                            | Practical sessions | Mid term exam     |
| 6. Diphtheria                                | 3     |                                        |                            |                    | Final term exam   |

|                |   |                                                                                      |  |  |  |
|----------------|---|--------------------------------------------------------------------------------------|--|--|--|
| 7. Pertussis   | 3 | risk, and contributing, assess an epidemic, formulate disease preventive strategies. |  |  |  |
| 8. TB          | 2 |                                                                                      |  |  |  |
| 9. HAV         | 2 |                                                                                      |  |  |  |
| 10. HBV        |   |                                                                                      |  |  |  |
| 11. HCV        |   |                                                                                      |  |  |  |
| 12. HEV        | 1 |                                                                                      |  |  |  |
| 13. HDV        | 1 |                                                                                      |  |  |  |
| 14. Leishmania | 1 |                                                                                      |  |  |  |
| 15. Cholera    | 1 |                                                                                      |  |  |  |
|                |   |                                                                                      |  |  |  |

| 11.Course Evaluation                                                                                                                                             |                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|
| 1.Theoretical exams (mid-year + end of year).<br>2.Practical exam: (oral exam, skill exam, practical information exam).<br>3.Reports.<br>4.Seminars by students. |                                                                                                                                         |
| 12. Learning and Teaching Resources                                                                                                                              |                                                                                                                                         |
| Required textbooks (curricular books, if any)                                                                                                                    | Text book of Public Health Medicine for Tropics.<br>Epidemiology. Fourth edition. Leon Gordis<br>Control of communicable disease manual |
| Main references (sources)                                                                                                                                        |                                                                                                                                         |
| Recommended books and references (scientific journals, reports...)                                                                                               |                                                                                                                                         |
| Electronic References, Websites                                                                                                                                  |                                                                                                                                         |

|                                 |                                                                                                                                                                            |
|---------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| المؤسسة التعليمية/ الكلية       | جامعة الفلوجة \ كلية الطب                                                                                                                                                  |
| القسم الذي يقدم المادة          | قسم علم الامراض                                                                                                                                                            |
| اسم البرنامج الأكاديمي          | الطب العدلي                                                                                                                                                                |
| نماذج الحضور المتوفرة           | الزامي                                                                                                                                                                     |
| العام الدراسي \ المرحلة         | ٢٠٢٥\٢٠٢٤<br>المرحلة الرابعة                                                                                                                                               |
| الفصل الدراسي \ السنة           | الفصل الدراسي الثاني ٢٠٢٥\٢٠٢٤                                                                                                                                             |
| ساعات الفصل الدراسي الكاملة     | 30 ساعة نظري + 45 ساعة عملي                                                                                                                                                |
| تاريخ بداية الفصل الدراسي الأول | 11/5/2025                                                                                                                                                                  |
| الأهداف العامة للفصل الدراسي    | تنمية معارف ومهارات وسلوك الطالب فيما يتعلق بالتعرف على أشكال العلامات السريرية لمختلف أنواع الجروح وكيفية كتابة تقرير الطب الشرعي لها، وكذلك تشخيص حالات الوفاة وارتباطها |

بالعنف أو الجريمة. بالإضافة إلى معرفة أهمية الطب الشرعي لمعظم الحوادث الطبيعية وغير الطبيعية مثل الصعق الكهربائي والاختناق والاعتداء الجنسي. إلى جانب النقاط المذكورة أعلاه، هناك بعداً سميّاً إضافيّاً حيث يتم شرح وتوضيح تأثيرات المواد الكيميائية والمواد السامة المختلفة من الجوانب السريرية والطبية القانونية

| هيكل الفصل الدراسي |                            |                        |                                                                                                                              |                                                                          |                                                                                                   |
|--------------------|----------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| الأسبوع            | الساعات                    | مخرجات التعلم المطلوبة | الوحدة/ الموضوع                                                                                                              | طرق التدريس                                                              | طرق التقييم                                                                                       |
| الأول              | ساعتين نظري + 3 ساعات عملي |                        | تغيرات الدم وسوائل الجسم وسياق العمل الجنائي في العراق                                                                       | محاضرات نظرية باستخدام أجهزة العرض والسميرة الذكية + تجارب ومهارات عملية | أسئلة شفوية في نهاية المحاضرة النظرية ومناقشة مع الطلاب حول المحاضرة + كتابة تقرير عن نتائج العمل |
| الثاني             | ساعتين نظري + 3 ساعات عملي |                        | اختبار البنية                                                                                                                |                                                                          |                                                                                                   |
| الثالث             | ساعتين نظري + 3 ساعات عملي |                        | حوادث القطارات والطائرات والوفيات الجراحية والتخدير العام                                                                    |                                                                          |                                                                                                   |
| الرابع             | ساعتين نظري + 3 ساعات عملي |                        | الوصول إلى مرتكب الجريمة من خلال أدلة الطب العدلي الحديث                                                                     |                                                                          |                                                                                                   |
| الخامس             | ساعتين نظري + 3 ساعات عملي |                        | مقدمة في علم السموم والتعامل مع المرضى المتسممين                                                                             |                                                                          |                                                                                                   |
| السادس             | ساعتين نظري + 3 ساعات عملي |                        | التسمم بالمواد الأفيونية والماريجوانا                                                                                        |                                                                          |                                                                                                   |
| السابع             | ساعتين نظري + 3 ساعات عملي |                        | تعاطي المخدرات الأخرى الكوكايين والأمفيتامين وعقار ثنائي إيثيل أميد حمض الليسرجيك والقات والبنزوديازيبينات والتسمم بالسيانيد |                                                                          |                                                                                                   |
| الثامن             | ساعتين نظري + 3 ساعات عملي |                        | التسمم بأحادي أكسيد الكربون والتسمم بالاسبرين                                                                                |                                                                          |                                                                                                   |
| التاسع             | ساعتين نظري + 3 ساعات عملي |                        | التسمم بالفوسفات العضوي & علم السموم من مضادات الاكتئاب ثلاثية الحلقات (TCA)                                                 |                                                                          |                                                                                                   |
| العاشر             | ساعتين نظري + 3 ساعات عملي |                        | التسمم بالكحوليات والإيثانول/الميثانول/الكربون & التسمم بالفيروسين والهيدروكربونات الأخرى                                    |                                                                          |                                                                                                   |
| الحادي عشر         | ساعتين نظري + 3 ساعات عملي |                        | التسمم بالمعادن الثقيلة ، الرصاص والزئبق                                                                                     |                                                                          |                                                                                                   |
| الثاني عشر         | ساعتين نظري + 3 ساعات عملي |                        | التسمم بدواء البرستول                                                                                                        |                                                                          |                                                                                                   |

|            |                               |                                                                          |  |
|------------|-------------------------------|--------------------------------------------------------------------------|--|
| الثالث عشر | ساعتين نظري +<br>٣ ساعات عملي | التسمم بالمواد الكاوية<br>المبيضة وغيرها من المواد<br>الكيميائية المهيجة |  |
| الرابع عشر | ساعتين نظري +<br>٣ ساعات عملي | الإدمان                                                                  |  |
| الخامس عشر | ساعتين نظري +<br>٣ ساعات عملي | مراجعة الفصل الثاني                                                      |  |

| المصادر والمتطلبات                                           |                                                                                                                      |
|--------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------|
| الكتب المطلوبة                                               |                                                                                                                      |
| المصدر الأساسي                                               | الوجيز في الطب العدلي وصفي محمد علي                                                                                  |
| الكتب والمراجع الموصى بها (المجلات العلمية والتقارير وغيرها) | COLOR ATLAS OF FORENSIC MEDICINE<br>AND PATHOLOGY<br>Casarett & Doull's Toxicology: The Basic Science of<br>Poisons. |
| المراجع الإلكترونية والمواقع الإلكترونية وغيرها              | Joseph prahlow : atlas of forensic pathology and<br>forensic pathology                                               |

## Clinical

|                                                                     |                                                                                                                                               |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                               |
| Obstetrics &gynecology                                              |                                                                                                                                               |
| 2. Course Code:                                                     |                                                                                                                                               |
|                                                                     |                                                                                                                                               |
| 3. Semester / Year:                                                 |                                                                                                                                               |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                     |                                                                                                                                               |
| 4. Description Preparation Date:                                    |                                                                                                                                               |
| 11/5/2025                                                           |                                                                                                                                               |
| 5. Available Attendance Forms:                                      |                                                                                                                                               |
| 4 <sup>th</sup> stage students                                      |                                                                                                                                               |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                               |
| 64                                                                  |                                                                                                                                               |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                               |
| Name:                                                               |                                                                                                                                               |
| 8. Course Objectives                                                |                                                                                                                                               |
| Course Objectives                                                   | History taking and clinical examination in obstetrics &gynecology<br>Interpretation of diagnostic imaging and tools such as CTG and partogram |

| 9. Teaching and Learning Strategies |                                                                                                                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Strategy</b>                     | The students are divided into small groups in obstetrics & gynecological wards to examination on real patients & in skill lab on dummies .<br>The students are divided into small groups to do seminars |
| 10. Course Structure                |                                                                                                                                                                                                         |

| 11.Course Evaluation              |
|-----------------------------------|
| OSCE<br>Long cases<br>Short cases |

| 12. Learning and Teaching Resources                                |                                                                                                                                                                                                    |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <ul style="list-style-type: none"> <li>•Dewhurst's Textbook of Obstetrics &amp; Gynecology 9th Edition By Keith Edmond</li> <li>•Obstetrics &amp; gynecology By Ten Teachers, 2 Edition</li> </ul> |
| Main references (sources)                                          |                                                                                                                                                                                                    |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                                    |
| Electronic References, Websites                                    |                                                                                                                                                                                                    |

| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                                                               |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Medicine                                                            |                                                                                                                                                                                                                                                                                                                                               |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                                                               |
|                                                                     |                                                                                                                                                                                                                                                                                                                                               |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                                                               |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                     |                                                                                                                                                                                                                                                                                                                                               |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                                                               |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                                                               |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                                                               |
| 4 <sup>th</sup> stage students                                      |                                                                                                                                                                                                                                                                                                                                               |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                                                               |
| 64                                                                  |                                                                                                                                                                                                                                                                                                                                               |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                                                               |
| Name:                                                               |                                                                                                                                                                                                                                                                                                                                               |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                                                               |
| <b>Course Objectives</b>                                            | <p>By the end of this course, students should be able to:</p> <ol style="list-style-type: none"> <li>1.Conduct physical examinations for each system.</li> <li>2.Exhibit professional behavior and effective communication with patients and healthcare teams.</li> <li>3.Apply ethical and legal principles in clinical practice.</li> </ol> |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                                                               |

|                             |                                                                                                                                                                                                                                                                                                        |
|-----------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Strategy</b>             | <ul style="list-style-type: none"> <li>•Bedside Teaching – Supervised patient assessments.</li> <li>•Simulation Training – Hands-on practice with mannequins.</li> <li>•Small Group Discussions – Analysis of clinical cases.</li> <li>•Self-Directed Learning – Researching patient cases.</li> </ul> |
| <b>10. Course Structure</b> |                                                                                                                                                                                                                                                                                                        |

| <b>Week</b> | <b>Hours</b> | <b>Unit/Module or Topic Title</b> | <b>Teaching Method</b> | <b>Assessment Method</b>         |
|-------------|--------------|-----------------------------------|------------------------|----------------------------------|
| First       | 8 Hrs.       | 1.CVS Examination                 | Clinical Session       | Short case<br>Discussion<br>OSCE |
| Second      | 8 Hrs.       | 2. CVS Examination                | Clinical Session       | Short case<br>Discussion<br>OSCE |
| Third       | 8 Hrs.       | 3. Chest Examination              | Clinical Session       | Short case<br>Discussion<br>OSCE |
| Fourth      | 8 Hrs.       | 4. Chest Examination              | Clinical Session       | Short case<br>Discussion<br>OSCE |
| Fifth       | 8 Hrs.       | 5. Abdominal Examination          | Clinical Session       | Short case<br>Discussion<br>OSCE |
| Sixth       | 8 Hrs.       | 6. Abdominal Examination          | Clinical Session       | Short case<br>Discussion<br>OSCE |
| Seventh     | 8 Hrs.       | 7. CNS Examination                | Clinical Session       | Short case<br>Discussion<br>OSCE |
| Eighth      | 8 Hrs.       | 8. CNS Examination.               | Clinical Session       | Short case<br>Discussion<br>OSCE |

|                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|
| <b>11.Course Evaluation</b>                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                |
| <ul style="list-style-type: none"> <li>• Continuous Assessment: <ul style="list-style-type: none"> <li>o Clinical Logbook.</li> <li>o Direct Observation of Procedural Skills (DOPS).</li> <li>o Mini Clinical Evaluation Exercise (Mini-CEX).</li> </ul> </li> <li>• Objective Structured Clinical Examination (OSCE): <ul style="list-style-type: none"> <li>o Simulated patient encounters.</li> <li>o Procedural skills stations.</li> </ul> </li> </ul> |                                |
| <b>12. Learning and Teaching Resources</b>                                                                                                                                                                                                                                                                                                                                                                                                                   |                                |
| Required textbooks (curricular books, if any)                                                                                                                                                                                                                                                                                                                                                                                                                | Macleod's Clinical Examination |
| Main references (sources)                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                |
| Recommended books and references (scientific journals, reports...)                                                                                                                                                                                                                                                                                                                                                                                           |                                |
| Electronic References, Websites                                                                                                                                                                                                                                                                                                                                                                                                                              |                                |

|                                                                            |                                                                                                                                                                                                         |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                         |
| Surgery                                                                    |                                                                                                                                                                                                         |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                         |
|                                                                            |                                                                                                                                                                                                         |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                         |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                            |                                                                                                                                                                                                         |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                         |
| 11/5/2025                                                                  |                                                                                                                                                                                                         |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                         |
| 4 <sup>th</sup> stage students                                             |                                                                                                                                                                                                         |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                         |
| 64                                                                         |                                                                                                                                                                                                         |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                         |
| Name:                                                                      |                                                                                                                                                                                                         |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                         |
| <b>Course Objectives</b>                                                   | History taking and clinical examination in surgical patients.<br>Interpretation of diagnostic imaging and lab results.<br>Basic surgical procedures like suturing, wound care, and catheterization.     |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                         |
| <b>Strategy</b>                                                            | The students are divided into small groups in obstetrics & gynecological wards to examination on real patients & in skill lab on dummies .<br>The students are divided into small groups to do seminars |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                         |

## General Surgery

Routine surgical work

Student-staff-patient relation

Introduction to formal long case history taking

Introduction to focused History taking :

Focused history

Neurosurgical history (Patients with head injury )

Patients with abdominal pain (acute abd., appendicitis)

Patients with surgical jaundice

Patients with lumps.-ulcers.

Patients with post-operative fever

Patients with abd. Distension

Patients with peri anal pain ,bleeding ,lumps

Patients with leg pain-ischemic limb

Patients with goiter, neck lump

Patients with dysphagia

Patients with breast mass-nipple discharge

Patients with upper and lower GIT bleeding

Patients with groin lump

Patients with swollen leg

Urological history (loin pain /renal ureteric colic, hematuria, retention of urine)

## Orthopedic history

Communication skills

Informed consent in surgical patients

Basic Skills of physical examination

Pulse examination

Blood pressure examination

Signs of anemia

Signs of dehydration

Signs of cyanosis

Signs of jaundice

Level of consciousness

Post-operative confusion, fever

Lumps /Cervical lymph nodes / Thyroid examination / Cystic hygroma

Examination of other neck masses (parotid ,submandibular)

Carotid artery pulsations and carotid body tumor

Position of trachea

Skills of physical examination of head & neck

Chest deformity description

Chest expansion

Signs of pneumothorax

Signs of pleural effusion

Heart sounds and position of apex beat

Breast examination

Physical examination of the chest

Inspection for hernia orifices and cough impulse

Surgical incisions

Inspection of diversion of the recti

Stomas and colostomies

Palpate for hepatomegaly and how to measure liver span

Palpate for splenomegaly

Palpate for kidneys

How to differentiate between spleen left /kidney masses

Examine for ascites

Signs of hernia

Examination of genitalia

Physical examination of abdomen and genitalia

Ulcers

Describe shape and deformity

Signs of chronic ischemia

Peripheral pulsations

Examination for foot ulcers

Examination for superficial and deep sensations

Examination for muscle power muscle tone ,and reflexes

|                                                                                                            |
|------------------------------------------------------------------------------------------------------------|
| Examination for amputations                                                                                |
| Signs of DVT                                                                                               |
| Signs of varicose veins                                                                                    |
| Physical examination of lower limbs                                                                        |
| Types of skin incisions                                                                                    |
| Describe colostomy (stoma)                                                                                 |
| Describe drains                                                                                            |
| Physical examination for post operation patient                                                            |
| General and local abdominal examination                                                                    |
| Evaluation of acute abdomen                                                                                |
| Evaluation of head injury                                                                                  |
| Examination of kidneys, scrotal exam haematocele, testicular masses, epidermal cyst, urological conditions |
| Orthopedic examination of limbs                                                                            |

## 11.Course Evaluation

- Continuous Assessment:
  - o Clinical Logbook.
  - o Direct Observation of Procedural Skills (DOPS).
  - o Mini Clinical Evaluation Exercise (Mini-CEX).
- Objective Structured Clinical Examination (OSCE):
  - o Simulated patient encounters.
  - o Procedural skills stations.

## 12. Learning and Teaching Resources

|                                                                    |                                                    |
|--------------------------------------------------------------------|----------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Baily and Love's Textbook / Short Practice Surgery |
| Main references (sources)                                          | Brows Textbook of Clinical examination             |
| Recommended books and references (scientific journals, reports...) |                                                    |
| Electronic References, Websites                                    |                                                    |

|                                                                     |                                                                                                                                                                                                                  |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                  |
| Pediatrics                                                          |                                                                                                                                                                                                                  |
| 2. Course Code:                                                     |                                                                                                                                                                                                                  |
|                                                                     |                                                                                                                                                                                                                  |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                  |
| 2 <sup>nd</sup> semester / 4 <sup>th</sup> year                     |                                                                                                                                                                                                                  |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                  |
| 11/5/2025                                                           |                                                                                                                                                                                                                  |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                  |
| 4 <sup>th</sup> stage students                                      |                                                                                                                                                                                                                  |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                  |
| 64                                                                  |                                                                                                                                                                                                                  |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                  |
| Name:                                                               |                                                                                                                                                                                                                  |
| 8. Course Objectives                                                |                                                                                                                                                                                                                  |
| Course Objectives                                                   | To Develop a Comprehensive Understanding of Pediatric Health and Disease<br>To Promote Evidence-Based Practice<br>To Enhance Communication and Patient-Centered Care<br>To Build Skills in Preventive Pediatrics |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                  |
| Strategy                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching                                                                            |
| 10. Course Structure                                                |                                                                                                                                                                                                                  |

| Week | Hours | Unit/Module or Topic Title        | Teaching Method                              | Assessment Method                                                    |
|------|-------|-----------------------------------|----------------------------------------------|----------------------------------------------------------------------|
|      |       |                                   | History<br>Clinical<br>practical<br>training | Discussin of history<br>Proper clinical<br>examination<br>Assessment |
| 1st  | 8hr.  | Respiratory proper examination    | //                                           | //                                                                   |
| 2nd  | 81hr. | Dehydration assessment            | //                                           | //                                                                   |
| 3rd  | 8hr.  | Cardiac proper examination        | //                                           | //                                                                   |
| 4th  | 8hr.  | Neonatal examination              | //                                           | //                                                                   |
| 5th  | 8hr.  | GIT proper examination            | //                                           | //                                                                   |
| 6th  | 8hr.  | Nutritional assessment            | //                                           | //                                                                   |
| 7th  | 8hr.  | CNS proper examination            | //                                           | //                                                                   |
| 8th  | 8hr.  | Hypotonia and rickets examination | //                                           | //                                                                   |

| 11.Course Evaluation                                                  |                                |
|-----------------------------------------------------------------------|--------------------------------|
| The most appropriate answer (case scenarios)<br>quizzes               |                                |
| 12. Learning and Teaching Resources                                   |                                |
| Required textbooks (curricular books, if any)                         | Hutchinson clinical pediatrics |
| Main references (sources)                                             |                                |
| Recommended books and references<br>(scientific journals, reports...) |                                |
| Electronic References, Websites                                       |                                |

## 5<sup>th</sup> year / 1<sup>st</sup> semester

### Course Description For

|                                                                            |                                                                                                                                                                                                                                                                                                                                          |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                          |
| Pediatrics                                                                 |                                                                                                                                                                                                                                                                                                                                          |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                          |
| Pedi-10                                                                    |                                                                                                                                                                                                                                                                                                                                          |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                          |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                          |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                          |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                          |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                          |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                          |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                          |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                          |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                          |
| <b>Course Objectives</b>                                                   | It is designed to provide students with a comprehensive foundation in the medical care of infants, children, and adolescents. These aims ensure that students develop the necessary knowledge, skills, and attitudes to address the unique healthcare needs of pediatric populations. Below are the typical aims of a Pediatrics course: |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                          |
| <b>Strategy</b>                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                                                    |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                          |

| Week | Hours | Unit/Module or Topic Title                                                                                                                                                                                                                                               | Teaching Method                                                                          | Assessment Method                                                                                    |
|------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
|      |       |                                                                                                                                                                                                                                                                          | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture |
| 1st  | 1hr.  | -Seizures in childhood<br>- Types of seizures<br>-Simple partial ,complex partial.<br><input type="checkbox"/> absence seizures                                                                                                                                          | //                                                                                       | //                                                                                                   |
| 2nd  | 1hr.  | -Febrile seizures<br><input type="checkbox"/> <input type="checkbox"/> generalized tonic, clonic and tonic clonic seizures<br><input type="checkbox"/> <input type="checkbox"/> Infantile spasms (west syndrome)<br><input type="checkbox"/> Juvenile myoclonic epilepsy | //                                                                                       | //                                                                                                   |
| 3rd  | 1hr.  | -Congenital anomalies of the nervous system:<br>- Spina bifida<br>- Meningocele<br>- Macrocephaly and microcephaly                                                                                                                                                       | //                                                                                       | //                                                                                                   |
| 4th  | 1hr.  | -Intracranial pressure (ICP): definition, etiology, risk factor, clinical feature, investigation, treatment<br>- Hydrocephalus<br>- Floppy baby                                                                                                                          | //                                                                                       | //                                                                                                   |
| 5th  | 1hr.  | -CNS infection                                                                                                                                                                                                                                                           | //                                                                                       | //                                                                                                   |
| 6th  | 1hr.  | -Diseases of the anterior horn cell:(<br>- -Werdnig-Hoffmann disease):<br><input type="checkbox"/> Peripheral neuropathy                                                                                                                                                 | //                                                                                       | //                                                                                                   |

|      |      |                                                                                                                                                                    |    |    |
|------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
|      |      | (Guillain-Barré syndrome)                                                                                                                                          |    |    |
| 7th  | 1hr. | -Mental retardation<br><input type="checkbox"/> Neurofibromatosis<br><input type="checkbox"/> Tuberous sclerosis<br><input type="checkbox"/> Sturge-weber syndrome | // | // |
| 8th  | 1hr. | <input type="checkbox"/> Cerebral palsy<br>-Autism                                                                                                                 | // | // |
| 9th  | 1hr  | -Approach to poisoned patient<br>- Initial evaluation & management of poisoning.                                                                                   | // | // |
| 10th | 1hr. | <b>Midterm Examination</b><br>Initial evaluation & management of acetaminophen & aspirin poisoning.                                                                | // | // |
| 11th | 1hr. | -Hydrocarbons, Tricyclic antidepressants, lead & organophosphorus poisoning                                                                                        | // | // |
| 12th | 1hr. | -Hypothyroidism<br>-Congenital and juvenile hypothyroidism                                                                                                         | // | // |
| 13th | 1hr  | -Ambiguous genitalia<br>- Congenital adrenal hyperplasia,                                                                                                          | // | // |
| 14th | 1hr  | -Short stature                                                                                                                                                     | // | // |
| 15th |      | - Diabetic ketoacidosis<br>- Hypoglycemia                                                                                                                          |    |    |

|                                                                    |  |
|--------------------------------------------------------------------|--|
| <b>11.Course Evaluation</b>                                        |  |
| The most appropriate answer (case scenarios) quizzes               |  |
| <b>12. Learning and Teaching Resources</b>                         |  |
| Required textbooks (curricular books, if any)                      |  |
| Main references (sources)                                          |  |
| Recommended books and references (scientific journals, reports...) |  |
| Electronic References, Websites                                    |  |

|                                                                            |                                                                                                                                                                                                                                         |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                         |
| Hematology                                                                 |                                                                                                                                                                                                                                         |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                         |
| Hema-11                                                                    |                                                                                                                                                                                                                                         |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                         |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                         |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                         |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                         |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                         |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                         |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                         |
| 30                                                                         |                                                                                                                                                                                                                                         |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                         |
| Name:                                                                      |                                                                                                                                                                                                                                         |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                         |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>•Understanding Blood Components and Function:</li> <li>•Recognizing Haematological Disorders:</li> <li>•Diagnostic Skills: CBC interpretation, Coagulation Profile &amp; Bone marrow.</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                         |
| <b>Strategy</b>                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem                                                                                                                           |

|                      |                      |
|----------------------|----------------------|
|                      | Small group teaching |
| 10. Course Structure |                      |

| Week              | Hours | Unit/Module or Topic Title                                                            | Teaching Method          | Assessment Method |
|-------------------|-------|---------------------------------------------------------------------------------------|--------------------------|-------------------|
| First week        | 2     | 1. Introduction : Hematopoiesis , Blood Elements)<br>2. Investigation In Haematology. | Lectures<br>Case Studies | Assay<br>MCQ      |
| Second Week       | 2     | 3. Presentation of blood disorders-1<br>4. Presentation of blood disorders-2          | Lectures<br>Case Studies | Assay<br>MCQ      |
| Third Week        | 2     | 5. Blood Transfusion.<br>6. Blood components.                                         | Lectures<br>Case Studies | Assay<br>MCQ      |
| Fourth Week       | 2     | 7. Transfusion Reaction.<br>8. HSC Transplantation.                                   | Lectures<br>Case Studies | Assay<br>MCQ      |
| Fifth Week        | 2     | 9. Anticoagulant & Antithrombotic Therapy<br>10. Approach for anaemia diagnosis.      | Lectures<br>Case Studies | Assay<br>MCQ      |
| Sixth Week        | 2     | 11. Nutritional Anaemia.<br>12. Haemolytic anaemia                                    | Lectures<br>Case Studies | Assay<br>MCQ      |
| Seventh Week      | 2     | 13. Haemoglobinopathy.<br>14. Haematological Malignancy.                              | Lectures<br>Case Studies | Assay<br>MCQ      |
| Eighth Week       | 2     | Midterm Examination                                                                   |                          |                   |
| Ninth Week        | 2     | 15. Acute Myeloid Leukaemia.<br>16. Acute Lymphoblastic Leukaemia.                    | Lectures<br>Case Studies | Assay<br>MCQ      |
| Tenth Week        | 2     | 17. Chronic Myeloid Leukaemia.<br>18. Chronic Lymphoblastic Leukaemia.                | Lectures<br>Case Studies | Assay<br>MCQ      |
| Eleventh Week     | 2     | 19. Lymphoma.<br>20. Myelodysplastic Syndrome.                                        | Lectures<br>Case Studies | Assay<br>MCQ      |
| Twelfth Week      | 2     | 21. Aplastic Anaemia.<br>22. Myeloproliferative Disorders.                            | Lectures<br>Case Studies | Assay<br>MCQ      |
| Thirteenth Week   | 2     | 23. Paraproteinemia.<br>24. Multiple Myeloma.                                         | Lectures<br>Case Studies | Assay<br>MCQ      |
| Fourteenth h Week | 2     | 25. Bleeding Disorders.<br>26. Thrombotic Disorders                                   | Lectures<br>Case Studies | Assay<br>MCQ      |
| Fifteenth Week    | 2     | 27. Overview-1<br>28. Overview-2                                                      | Lectures<br>Case Studies | Assay<br>MCQ      |

## 11. Course Evaluation

1. MCQ.
2. OSCE.

| 12. Learning and Teaching Resources                                |                                                                                            |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Davidson's Principles & Practice Of Medicine 2 Edition<br>Hoffbrand's Essential Hematology |
| Main references (sources)                                          |                                                                                            |
| Recommended books and references (scientific journals, reports...) |                                                                                            |
| Electronic References, Websites                                    |                                                                                            |

|                                                                            |                                                                                                                                       |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                       |
| neurosurgery                                                               |                                                                                                                                       |
| <b>2. Course Code:</b>                                                     |                                                                                                                                       |
|                                                                            |                                                                                                                                       |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                       |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                       |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                       |
| 11/5/2025                                                                  |                                                                                                                                       |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                       |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                       |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                       |
| 30                                                                         |                                                                                                                                       |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                       |
| Name:                                                                      |                                                                                                                                       |
| <b>8. Course Objectives</b>                                                |                                                                                                                                       |
| <b>Course Objectives</b>                                                   | To produce students who are proficient in diagnosing and treating patients with neurology and neurosurgical diseases                  |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                       |
| <b>Strategy</b>                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching |
| <b>10. Course Structure</b>                                                |                                                                                                                                       |

| Week | Hou<br>rs | Unit/Module or<br>Topic Title                              | Teaching<br>Method                                  | Assessment<br>Method              |
|------|-----------|------------------------------------------------------------|-----------------------------------------------------|-----------------------------------|
| 1    | 2         | Approach For The Patient With Neurological Disease.        | Direct lectures, interactive, case solving problems | Multiple choice questions, quizez |
| 2    | 2         | Cerbrovascular accendents                                  |                                                     |                                   |
| 3    | 2         | Headache                                                   |                                                     |                                   |
| 4    | 2         | Infections of central nervous system                       |                                                     |                                   |
| 5    | 2         | epilepsy<br>neurophtahlmology                              |                                                     |                                   |
| 6    | 2         | Demyelinating Disease<br>Neurodegenerative Disorders       |                                                     |                                   |
| 7    | 2         | Neuromuscular Junction Disease<br>Peripheral Neuropathies  |                                                     |                                   |
| 8    | 2         | coma                                                       |                                                     |                                   |
| 9    | 2         | Movements Disorders<br>Dementia                            |                                                     |                                   |
| 10   | 2         | Acute Head Injury                                          |                                                     |                                   |
| 11   | 2         | Intracranial Hemorrhage<br>Subarachnoidal Hemorrhage       |                                                     |                                   |
| 12   | 2         | Intracranial Space Occupying Lesion<br>Pseudotumor cerebri |                                                     |                                   |
| 13   | 2         | Congenital anomalies                                       |                                                     |                                   |
| 14   | 2         | Spinal Cord Compression<br>Spinal Cord Vascular Diseases   |                                                     |                                   |
| 15   | 2         | Functional neurosurgery                                    |                                                     |                                   |

## 12. Learning and Teaching Resources

|                                               |                                |
|-----------------------------------------------|--------------------------------|
| Required textbooks (curricular books, if any) | Davidson<br>Harrison neurology |
| Main references (sources)                     |                                |
| Recommended books and references              |                                |

|                                   |  |
|-----------------------------------|--|
| (scientific journals, reports...) |  |
| Electronic References, Websites   |  |

|                                                                            |                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                            |
| Radiology                                                                  |                                                                                                                                                                                                                                                                                                            |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                            |
|                                                                            |                                                                                                                                                                                                                                                                                                            |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                            |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                            |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                            |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                            |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                            |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                            |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                            |
| 30                                                                         |                                                                                                                                                                                                                                                                                                            |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                            |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                            |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                            |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of urology and nephrology to the medical students in order to build the clinical knowledge and clinical skills in the next years in radiological diagnosis of the different diseases , in a way to participate in optimizing th medical services to the society. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                            |
| <b>Strategy</b>                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                      |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                            |

| Date                 | Topics & Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 <sup>st</sup> Week | <u><b>Introduction :</b></u> <ol style="list-style-type: none"> <li>1. Aims &amp; objectives of radiology.</li> <li>2. The imaging department.</li> <li>3. Basic principles of X-ray, ultrasound, radio-nuclide imaging, CT &amp; MRI.</li> <li>4. Indications, limitations, &amp; contraindications of x-ray, ultrasound, radionuclide imaging, CT &amp; MRI.</li> <li>5. Contrast medium used in radiology.</li> <li>6. X-ray hazards &amp; radiation protection.</li> </ol> |
| 2 <sup>nd</sup> Week | <u><b>Respiratory System: I ,II , III</b></u>                                                                                                                                                                                                                                                                                                                                                                                                                                  |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                            | <ol style="list-style-type: none"> <li>1. Radiological anatomy of the lungs.</li> <li>2. Investigations in chest diseases.</li> <li>3. Chest x-ray technique &amp; procedure, interpretation of normal chest x-ray.</li> <li>4. Diseases of the chest with normal chest x-ray.</li> <li>5. Radiological signs of lung disease (Silhouette sign, air space filling, pulmonary collapse, spherical shadows, cavitation, calcification, hilar enlargement, line &amp; widespread shadows).</li> </ol> |
| <b>3<sup>rd</sup> Week</b> | <ol style="list-style-type: none"> <li>1. Diseases of the pleura.</li> <li>2. Diseases of the mediastinum.</li> <li>3. specific lung diseases (pneumonia, Lung abscess, Pulmonary TB, Pulmonary Hydatid, Diseases of the airway, Pulmonary embolism, Bronchogenic carcinoma, Pulmonary metastases, Pulmonary lymphoma, RDS &amp; ARDS, Chest trauma, Radiation pneumonitis, Cystic fibrosis).</li> <li>4. Diseases of the diaphragm.</li> </ol>                                                    |
| <b>4<sup>th</sup> Week</b> | <p><b><u>Cardiovascular System: I, II</u></b></p> <ol style="list-style-type: none"> <li>1. Investigations of the cardiovascular system.</li> <li>2. Radiological evidence of heart disease: (Heart size &amp; shape, evidence of pericardial disease, pulmonary vessels).</li> <li>3. Specific heart disease (Heart failure, Valvular heart disease, ischemic heart disease, congenital heart disease).</li> <li>4. Diseases of the aorta.</li> <li>5. Dextrocardia.</li> </ol>                   |
| <b>5<sup>th</sup> Week</b> | <p><b><u>Gastrointestinal Tract : I, II</u></b></p> <ol style="list-style-type: none"> <li>1. Normal radiographic anatomy.</li> <li>2. Types of contrast study of the GIT</li> <li>3. Specific radiological terms in GIT diseases.</li> <li>4. Diseases of the esophagus.</li> <li>5. Diseases of the stomach small bowel.</li> <li>6. Diseases of the large bowel.</li> </ol>                                                                                                                     |
| <b>7<sup>th</sup> Week</b> | <p><b><u>Liver &amp; Pancreas:</u></b></p> <ol style="list-style-type: none"> <li>1. Normal radiographic anatomy &amp; investigations of hepatobiliary system.</li> <li>2. Diseases of the liver &amp; biliary system.</li> <li>3. Radiological investigations of the spleen.</li> <li>4. Radiological investigations &amp; diseases of the pancreas.</li> </ol>                                                                                                                                   |
| <b>8<sup>th</sup> Week</b> | <ol style="list-style-type: none"> <li>1. Diseases of the peritoneum (ascitis, peritoneal tumors, intra-peritoneal abscesses)</li> <li>2. Investigations of the retro-peritoneum.</li> <li>3. Diseases of the retro-peritoneum (retro-peritoneal lymphadenopathy, disease of the adrenal gland, retro-peritoneal tumors, aortic aneurysm, retro-peritoneal hematoma, retro-peritoneal &amp; psoas abscesses)</li> </ol>                                                                            |
| <b>9<sup>th</sup> Week</b> | <p><b><u>Urinary tract I, II</u></b></p> <ol style="list-style-type: none"> <li>1. Investigations of the urinary tract</li> <li>2. Urinary calculi &amp; Nephrocalcinosis.</li> <li>3. Urinary tract obstruction.</li> <li>4. Renal paranchymal masses (simple renal cyst, Angiomyolipoma, Renal cell carcinoma).</li> </ol>                                                                                                                                                                       |

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | 5. Urothelial tumor.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>10<sup>th</sup> Week</b> | <ol style="list-style-type: none"> <li>1. Infection (acute &amp; Emphysematous pyelonephritis, Renal &amp; perinephric abscess, Pyonephrosis, Renal TB, Chronic pyelonephritis).</li> <li>2. Vesico-ureteric reflux.</li> <li>3. Renal trauma.</li> <li>4. Chronic renal failure.</li> <li>5. Congenital variation of the urinary tract.</li> <li>6. Diseases of the UB, diseases of the prostate, diseases of the Urethra.</li> <li>7. Diseases of the Scrotum &amp; testes.</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>11<sup>th</sup> Week</b> | <p><b>Female Genital Tract</b></p> <ol style="list-style-type: none"> <li>1. Female Genital Tract Radiological Investigation And Diseases Investigations &amp; normal radiographic anatomy.</li> <li>2. Specific diseases of the female genital tract (ovarian masses, uterine masses, pelvic inflammatory disease, endometriosis).</li> <li>3. Ultrasound appearance of normal uterine pregnancy.</li> <li>4. Ectopic pregnancy.</li> </ol> <p><b>Breast imaging</b></p> <ol style="list-style-type: none"> <li>5. Investigations of breast.</li> <li>6. Normal radiographic anatomy.</li> <li>7. Specific diseases of the breast (simple cyst, fibroadenoma, breast carcinoma).</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>12<sup>th</sup> Week</b> | <p><b>Skull &amp; brain I, II</b></p> <ol style="list-style-type: none"> <li>1. Imaging investigations of the skull &amp; brain</li> <li>2. Normal radiographic anatomy of the skull &amp; brain.</li> <li>3. Specific brain disorders: (brain tumors, stroke, infection, multiple sclerosis).</li> <li>4. Radiology of head injury.</li> </ol> <p><b>Sinuses, orbit &amp; neck I, II</b></p> <ol style="list-style-type: none"> <li>1. Imaging techniques &amp; diseases of the para-nasal sinuses.</li> <li>2. Imaging techniques &amp; diseases of the orbit.</li> <li>3. Imaging techniques &amp; diseases of the salivary glands.</li> <li>4. Imaging techniques &amp; diseases of the thyroid &amp; para-thyroid gland.</li> </ol> <p><b>Angiography</b></p> <ol style="list-style-type: none"> <li>1. Definition, indications, principles &amp; complications of arteriography.</li> <li>2. Indications of venography.</li> <li>3. Specific vascular disorders (Aneurysms, Atheroma, arterio-venous fistula &amp; malformation, Stenosis &amp; Fibromuscular hyperplasia, Thrombosis &amp; Embolism, vascular Tumors).</li> </ol> <p><b>Interventional radiology</b></p> <ol style="list-style-type: none"> <li>1. Vascular interventional procedures.</li> <li>2. Percutaneous needle biopsy.</li> </ol> |

|                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                             | 3. Percutaneous drainage of abscess & fluid collections.<br>4. Interventions in urinary obstruction.<br>5. Interventions in biliary obstruction.                                                                                                                                                                                                                                                                                                                                                   |
| <b>13<sup>th</sup> Week</b> | <b>Radiology of bone diseases I, II</b><br><br>1. Plain radiographic Signs of bone diseases<br>2. Classification of bone diseases.<br>3. Radiological assessment of solitary bone lesion.<br>4. Malignant bone tumors: (Osteosarcoma, Chondrosarcoma, Ewing s sarcoma, Giant cell tumor).<br>5. Benign tumors & tumor like lesion.                                                                                                                                                                 |
| <b>14<sup>th</sup> Week</b> | 1. Bone infection (Osteomyelitis, TB).<br>2. Multiple focal bone lesions (bone metastases & multiple myeloma).<br>3. Generalized decrease in bone density.<br>4. Generalized increase in bone density.<br>5. Acromegally.<br>6. Radiology of bone trauma.<br><b>Radiology of joint diseases</b><br>1. Imaging techniques of joint diseases.<br>2. Plain radiographic Signs of joint diseases<br>3. Arthritis (rheumatoid arthritis, osteoarthritis, pyogenic arthritis).<br>4. Avascular necrosis. |
| <b>15<sup>th</sup> Week</b> | <b>Radiology of the spine I, II</b><br><br>1. Imaging investigations of the spine<br>2. Anatomical review.<br>3. Plain radiographic Signs of spinal abnormality.<br>4. Specific diseases of the spine: (Metastases, lymphoma & Myeloma, spinal infection, spinal trauma, degenerative disc disease, Spinal stenosis, Ankylosing spondylitis, Spinal dysraphism, spinal cord compression).                                                                                                          |

## 11.Course Evaluation

1. MCQ.
2. OSCE.

## 12. Learning and Teaching Resources

|                                                                    |                                                   |
|--------------------------------------------------------------------|---------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Diagnostic imaging , 7th edition , by P Armstrong |
| Main references (sources)                                          |                                                   |
| Recommended books and references (scientific journals, reports...) |                                                   |
| Electronic References, Websites                                    |                                                   |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Psychiatry                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Course Objectives</b>                                                   | <p>1. Making candidate able to apply all the knowledge he gained to develop and implement new approaches in diagnosis and management as a specialist in the field of psychiatry with high perfect professional skills.</p> <p>2. The candidate will have a wide vision about development of new methods and tools to analyze and criticize any research scientifically, and to use different technological methods which add to his/her Professional applications</p> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>Strategy</b>                                                            | <p>1. focusses on learning methods and the questions were related to clinical teaching</p> <p>2. which focusses on teaching aids and includes live patient presentation, chalkboard, slides, video, overheads, and computer-directed</p> <p>3. focusses on verbal and nonverbal behavior and includes questions on enthusiasm, language, and voice (clear, audible, and variable), eye contact with students, movement and gestures, and sense of humor.</p>          |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |

| Week | Hours | Unit/Module or Topic Title                                                                      | Teaching Method  | Assessment Method                  |
|------|-------|-------------------------------------------------------------------------------------------------|------------------|------------------------------------|
| 1    | 2     | 1.history taking and mental state examination<br>2. history taking and mental state examination | Oral explanation | Fast quizzes at the end of lecture |
| 2    | 2     | 3.introduction to psychiatry<br>4.introduction to psychiatry                                    | Oral explanation | Fast quizzes at the end of lecture |
| 3    | 2     | 5.mood disorder<br>6.mood disorder                                                              | Oral explanation | Fast quizzes at the end of lecture |
| 4    | 2     | 7. psychopharmacology<br>8. psychopharmacology                                                  | Oral explanation | Fast quizzes at the end of lecture |
| 5    | 2     | 9. eating disorder<br>10. eating disorder                                                       | Oral explanation | Fast quizzes at the end of lecture |
| 6    | 2     | 11.schizophrenia<br>12.schizophrenia                                                            | Oral explanation | Fast quizzes at the end of lecture |
| 7    | 2     | 13. post-traumatic stress disorder<br>14. adjustment disorder                                   | Oral explanation | Fast quizzes at the end of lecture |
| 8    |       | Mid exam                                                                                        |                  |                                    |
| 9    | 2     | 15. obsessive compulsive disorder<br>16. general anxiety disorder                               | Oral explanation | Fast quizzes at the end of lecture |
| 10   | 2     | 17.panic disorder<br>18.Social anxiety disorder                                                 | Oral explanation | Fast quizzes at the end of lecture |
| 11   | 2     | 19.Personality disorder<br>20.Personality disorder                                              | Oral explanation | Fast quizzes at the end of lecture |
| 12   | 2     | 21.Psychotherapy<br>22.Somatic Symptom and Related Disorders                                    | Oral explanation | Fast quizzes at the end of lecture |
| 13   | 2     | 23.Suicide, Violence, and                                                                       | Oral explanation | Fast quizzes at the end of lecture |

|    |   |                                                                                                              |                     |                                       |
|----|---|--------------------------------------------------------------------------------------------------------------|---------------------|---------------------------------------|
|    |   | Emergency<br>Psychiatric<br>Medicine<br>24.Suicide,<br>Violence, and<br>Emergency<br>Psychiatric<br>Medicine |                     |                                       |
| 14 | 2 | 25.Child psychiatry<br>26.Mental<br>Disorders Due to a<br>General Medical<br>Condition                       | Oral<br>explanation | Fast quizzes at the<br>end of lecture |
| 15 | 2 | 27.Dissociative<br>Disorders<br>28.Sexual<br>Dysfunction and<br>Gender Dysphoria                             | Oral<br>explanation | Fast quizzes at the<br>end of lecture |

## 11.Course Evaluation

Quizzes  
Mid-term theory exam  
Final theory exam  
By contribution to the discussion

## 12. Learning and Teaching Resources

|                                                                       |                                |
|-----------------------------------------------------------------------|--------------------------------|
| Required textbooks (curricular books, if any)                         | Oxford of psychiatry text book |
| Main references (sources)                                             |                                |
| Recommended books and references<br>(scientific journals, reports...) |                                |
| Electronic References, Websites                                       |                                |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Ophthalmology                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Opth.33                                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 30                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Course Objectives</b>                                                   | The aim of ophthalmology course is to provide students with comprehensive knowledge skills related to the diagnosis, treatment, and prevention of eye diseases and disorders. course typically covers topics such as anatomy and physiology of the eye, refractive error common eye conditions (like glaucoma, cataracts, and retinal diseases), surgical techniques, and the use of diagnostic tools like ophthalmoscopy and slit lamp. The goal to equip students with the clinical and practical expertise needed to manage eye health and vision problems, ultimately contributing to better patient care and outcomes. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Strategy</b>                                                            | 1. focusses on learning methods and the questions were related to clinical teaching<br>2. which focusses on teaching aids and includes live patient presentation, chalkboard, slides, video, overheads, and computer-directed<br>3. focusses on verbal and nonverbal behavior and includes questions on enthusiasm, language, and voice (clear, audible, and variable), eye contact with students, movement and gestures, and sense of humor.                                                                                                                                                                               |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

| Week | Hours | Unit/Module or Topic Title                                                        | Teaching Method                                                                          | Assessment Method                                                                                                                                  |
|------|-------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 2     | 1. Introduction to optics, properties of light<br>2. Refractive Errors            | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work |
| 2    | 2     | 3. Eyelid anatomy<br>4. Eyelid infection and lesions, Ptosis                      |                                                                                          |                                                                                                                                                    |
| 3    | 2     | 5. Orbital disorders<br>6. Lacrimal disorders                                     |                                                                                          |                                                                                                                                                    |
| 4    | 2     | 7. Conjunctival disorders<br>8. Conjunctival lesions and degeneration             |                                                                                          |                                                                                                                                                    |
| 5    | 2     | 9. Corneal diseases<br>10. Scleral diseases                                       |                                                                                          |                                                                                                                                                    |
| 6    | 2     | 11. Crystalline lens disorders<br>12. Cataract surgery                            |                                                                                          |                                                                                                                                                    |
| 7    | 2     | 13. Glaucoma<br>14. Glaucoma management                                           |                                                                                          |                                                                                                                                                    |
| 8    | 2     | 15. Investigation in ophthalmology<br>16. Ultrasound in ophthalmology             |                                                                                          |                                                                                                                                                    |
| 9    | 2     | 17. Retinal breaks and detachment<br>18. Surgical treatment of retinal detachment |                                                                                          |                                                                                                                                                    |
| 10   | 2     | 19. Retinal vascular diseases<br>20. Diabetic retinopathy                         |                                                                                          |                                                                                                                                                    |
| 11   | 2     | 21. Anatomy of ocular muscles<br>22. Strabismus surgery                           |                                                                                          |                                                                                                                                                    |
| 12   | 2     | 23. Neuroophthalmology<br>24. Cranial nerve palsies                               |                                                                                          |                                                                                                                                                    |
| 13   | 2     | 25. Anatomy of uveal tract, uveitis<br>26. Management of uveitis                  |                                                                                          |                                                                                                                                                    |
| 14   | 2     | 27. Intraocular and extraocular tumors<br>28. Retinoblastoma Choroidal melanoma   |                                                                                          |                                                                                                                                                    |
| 15   | 2     | 29. Ocular trauma<br>30. Management of eye trauma                                 |                                                                                          |                                                                                                                                                    |

### 11. Course Evaluation

Multiple choice questions, Short Essays, Problem solving cases  
Quizzes

### 12. Learning and Teaching Resources

|                                               |                                                                                                                                                   |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any) | 1. Kanski's Clinical Ophthalmology. A systematic approach, Tenth Edition.<br>2. Clinical Optics. By A.R. Elkington and Helen Frank, Third Edition |
|-----------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------|

|                                                                       |  |
|-----------------------------------------------------------------------|--|
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Orthopedics & fractures                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Orth-fra-1                                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 45                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledge of Orthopedics & fractures to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including, Orthopedics & fractures and managements and the complications associated with them and their management and how to deal with them in emergency department, in a way to participate in optimizing the medical services to the society |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Strategy</b>                                                            | 1. focusses on learning methods and the questions were related to clinical teaching<br>2. which focusses on teaching aids and includes live patient presentation, chalkboard, slides, video, overheads, and computer-directed<br>3. focusses on verbal and nonverbal behavior and includes questions on enthusiasm, language, and voice (clear, audible, and variable), eye contact with students, movement and gestures, and sense of humor.                                   |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

| Week | Hours | Unit/Module or Topic Title | Teaching Method | Assessment Method |
|------|-------|----------------------------|-----------------|-------------------|
|      |       |                            |                 |                   |

|   |   |                                                                                                                                                                                                                                    |                                                                                          |                                                                                                                                                    |
|---|---|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| 1 | 3 | <b>Fracture &amp; joint injuries</b><br>1.The management of major injuries<br>2.Principle of fractures. ( I ) : Classification of fracture & fracture healing.<br><b>3.Principle of fractures. ( II ) :Management of fracture.</b> | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture + writing a report on the results of the work |
| 2 | 3 | 4.Principle of fractures. ( III ): Complication of fracture<br><br>5.Principle of fractures. ( IV ): Fracture in children & joint injuries<br><br>6.Injuries of the shoulder, upper arm and elbow (I).                             |                                                                                          |                                                                                                                                                    |
| 3 | 3 | 7.Injuries of the shoulder, upper arm and elbow (II).<br><br>8.Injuries of the forearm and wrist.(I)<br><br>9.Injuries of the forearm and wrist ( II ).                                                                            |                                                                                          |                                                                                                                                                    |
| 4 | 3 | 10.Hand injuries.<br>11.Injuries of the spine.<br><br>12.Injuries of the pelvis.                                                                                                                                                   |                                                                                          |                                                                                                                                                    |
| 5 | 3 | 13.Injuries of the hip and femur ( I )<br><br>14.Injuries of the hip and femur ( II )<br><br>15.Injuries of the knee and leg.                                                                                                      |                                                                                          |                                                                                                                                                    |
| 6 | 3 | 16.Injuries of the ankle and foot.                                                                                                                                                                                                 |                                                                                          |                                                                                                                                                    |

|    |   |                                                                                                                               |  |  |
|----|---|-------------------------------------------------------------------------------------------------------------------------------|--|--|
|    |   | <b>General Orthopedics</b><br>1.Orthopedic diagnosis.<br><br>2.Infection. ( I )                                               |  |  |
| 7  | 3 | 3.Infection. ( II )<br><br>4.Rheumatic disorders.<br><br>5.Crystal deposition disorders.                                      |  |  |
| 8  | 3 | 6.Osteoarthritis.<br><br>7.Osteonecrosis and related disorders<br><br>8.Metabolic and endocrine disorders & genetic disorder  |  |  |
| 9  | 3 | 9.Bone tumor (I).                                                                                                             |  |  |
| 10 | 3 | 10.Bone tumor ( II )<br><br>11.Peripheral nerve injuries & neuromuscular disorder<br>12.Orthopedic operations                 |  |  |
| 11 | 3 | <b>Regional Orthopedic:</b><br>1.Shoulder and pectoral girdle disorders.<br>2.Elbow & forearm disorders.<br>3.Wrist disorders |  |  |
| 12 | 3 | 4.Hand disorders.<br><br>5.Hand infection.<br><br>6.Hip disorders                                                             |  |  |
| 13 | 3 | 7.Knee disorder & knee swelling.<br>8.Ankle & foot disorder.<br>9.Cervical disorders & Torticollis                            |  |  |
| 14 | 3 | 10.Spine disorder: disc prolapsed, Spondylolisthesis.                                                                         |  |  |

|    |   |                              |  |  |
|----|---|------------------------------|--|--|
|    |   | 11.Ankylosing<br>spondylitis |  |  |
|    |   | 12.Soft tissue tumors        |  |  |
| 15 | 3 | Overview                     |  |  |

|                                                                       |                                                               |
|-----------------------------------------------------------------------|---------------------------------------------------------------|
| <b>11.Course Evaluation</b>                                           |                                                               |
| Multiple choice questions<br>quizzes                                  |                                                               |
| <b>12. Learning and Teaching Resources</b>                            |                                                               |
| Required textbooks (curricular books, if any)                         | Apley's System of<br>Orthopedics and Fractures. Ninth Edition |
| Main references (sources)                                             |                                                               |
| Recommended books and references<br>(scientific journals, reports...) |                                                               |
| Electronic References, Websites                                       |                                                               |

|                                                                            |                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                            |
| Gynecology                                                                 |                                                                                                                                                                                                                                                                            |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                            |
| Gyne-3                                                                     |                                                                                                                                                                                                                                                                            |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                            |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                            |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                            |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                            |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                            |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                            |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                            |
| 30                                                                         |                                                                                                                                                                                                                                                                            |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                            |
| Name:                                                                      |                                                                                                                                                                                                                                                                            |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                            |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of gynecology to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the emergent conditions, in a way to partici |

|                                     |                                                                                                                                       |                                                   |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
|                                     |                                                                                                                                       | in optimizing the medical services to the society |
| 9. Teaching and Learning Strategies |                                                                                                                                       |                                                   |
| Strategy                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching |                                                   |
| 10. Course Structure                |                                                                                                                                       |                                                   |

| Week | Hours | Unit/Module or Topic Title                                              | Teaching Method                                                                          | Assessment Method                                                                                    |
|------|-------|-------------------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1st  | 2hrs. | Anatomy And Embryology of female genital tract                          | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture |
| 2nd  | 2hrs. | Normal , Abnormal Sexual developments & Normal Puberty                  | //                                                                                       | //                                                                                                   |
| 3rd  | 2hrs. | Abnormal Puberty & Normal Menstrual Cycle                               | //                                                                                       | //                                                                                                   |
| 4th  | 2hrs. | Abnormal Vaginal Bleeding & Amenorrhea I                                | //                                                                                       | //                                                                                                   |
| 5th  | 2hrs. | Amenorrhea II Oligomenorrhea And Hyperandrogenic Disorder               | //                                                                                       | //                                                                                                   |
| 6th  | 2hrs. | Dysmenorrhea Genital Infection In Gynecology I                          | //                                                                                       | //                                                                                                   |
| 7th  | 2hrs. | Genital Infection In Gynecology II & III                                | //                                                                                       | //                                                                                                   |
| 8th  | 2hrs. | Infertility & Assisted Reproduction I & II                              | //                                                                                       | //                                                                                                   |
| 9th  | 2hrs. | Problem In Early Pregnancy/Ectopic Pregnancy & Miscarriage              | //                                                                                       | //                                                                                                   |
| 10th | 2hrs. | Gestational trophoblastic Disease & Benign Disease Of Uterus And Cervix | //                                                                                       | //                                                                                                   |
| 11th | 2hrs. | Endometriosis & Adenomyosis                                             | //                                                                                       | //                                                                                                   |
| 12th | 2hrs. | Malignant Disease Of The Uterus & Benign Disease Of The Ovary           | //                                                                                       | //                                                                                                   |
| 13th | 2hrs. | Malignant Disease Of The Ovary                                          | //                                                                                       | //                                                                                                   |

|      |       |                                                |    |    |
|------|-------|------------------------------------------------|----|----|
|      |       |                                                |    |    |
| 14th | 2hrs. | Premalignant & Malignant Disease Of The Cervix | // | // |
| 15th | 2hrs. | & Menopause<br>Sex hormone therapy             | // | // |

### 11.Course Evaluation

The most appropriate answer (case scenarios)  
quizzes

### 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                                      |
|--------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <ul style="list-style-type: none"> <li>•Dewhurst's Textbook of Obstetrics &amp; Gynecology 9th Edition By Keith Edmond</li> <li>•Gynecology By Ten Teachers, 21th Edition</li> </ul> |
| Main references (sources)                                          |                                                                                                                                                                                      |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                      |
| Electronic References, Websites                                    |                                                                                                                                                                                      |

**5<sup>th</sup> year / 2<sup>nd</sup> semester**  
**Course Description Form**

|                                                                            |                                                                                                                                                                                                                                                                                                                              |
|----------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                              |
| Rheumatology                                                               |                                                                                                                                                                                                                                                                                                                              |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                              |
|                                                                            |                                                                                                                                                                                                                                                                                                                              |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                              |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                              |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                              |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                              |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                              |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                              |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                              |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                              |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                              |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                              |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                              |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>•Understanding main joints, muscle and bone disorders.</li> <li>•Recognizing rheumatological Disorders.</li> <li>•Diagnostic Skills : CBC and metabolic panel changes in multiple rheumatological disorders</li> <li>•Synovial fluid analysis and principle of CTD screen.</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                              |
| <b>Strategy</b>                                                            | Lectures directly informed to the students from the teachers.<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                                        |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                              |

| Week         | Hours | ILOs | Unit / Module or Topic Title                   |
|--------------|-------|------|------------------------------------------------|
| First week   | 1     |      | Introduction to rheumatology                   |
| Second Week  | 2     |      | Presenting problems in musculoskeletal disease |
| Third Week   | 3     |      | Osteoarthritis                                 |
| Fourth Week  | 4     |      | Crystal arthropathy                            |
| Fifth Week   | 5     |      | Rheumatoid arthritis and sjogren syndrome      |
| Sixth Week   | 6     |      | SERONEGATIVE SPONDYLOARTHRITIS (SPA) Part 1    |
| Seventh Week | 7     |      | SPA Part 2                                     |
| Eighth Week  | 8     |      | Midterm Examination                            |

|                        |    |  |                                       |
|------------------------|----|--|---------------------------------------|
| <b>Ninth Week</b>      | 9  |  | SLE and APS                           |
| <b>Tenth Week</b>      | 10 |  | Vasculitis                            |
| <b>Eleventh Week</b>   | 11 |  | Bahcets syndrome & Systemic sclerosis |
| <b>Twelfth Week</b>    | 12 |  | MCTD and myositis                     |
| <b>Thirteenth Week</b> | 13 |  | Osteoporosis                          |
| <b>Fourteenth Week</b> | 14 |  | Osteomalacia and pagets disease       |
| <b>Fifteenth Week</b>  | 15 |  | Approach to child with joint pain     |

|                                                                    |                                   |
|--------------------------------------------------------------------|-----------------------------------|
| <b>11.Course Evaluation</b>                                        |                                   |
| The most appropriate answer (case scenarios) quizzes               |                                   |
| <b>12. Learning and Teaching Resources</b>                         |                                   |
| Required textbooks (curricular books, if any)                      | Core Textbook<br>Course Materials |
| Main references (sources)                                          |                                   |
| Recommended books and references (scientific journals, reports...) |                                   |
| Electronic References, Websites                                    |                                   |

|                                                                            |                                                                             |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                             |
| Otorhinolaryngology                                                        |                                                                             |
| <b>2. Course Code:</b>                                                     |                                                                             |
|                                                                            |                                                                             |
| <b>3. Semester / Year:</b>                                                 |                                                                             |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                             |
| <b>4. Description Preparation Date:</b>                                    |                                                                             |
| 11/5/2025                                                                  |                                                                             |
| <b>5. Available Attendance Forms:</b>                                      |                                                                             |
| 5 <sup>th</sup> stage students                                             |                                                                             |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                             |
| 30                                                                         |                                                                             |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                             |
| Name:                                                                      |                                                                             |
| <b>8. Course Objectives</b>                                                |                                                                             |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of Otorhinolaryngology to the med |

|                                     |                                                                                                                                                                                                                                                                                           |
|-------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including , nose ,ear and throat diseases and emergent conditions, in a way to participate in optimizing the medical services to the society |
| 9. Teaching and Learning Strategies |                                                                                                                                                                                                                                                                                           |
| <b>Strategy</b>                     | Interactive lectures<br>Clinical based case scenario<br>Small groups learning to solve complex medical or surgical problem                                                                                                                                                                |
| 10. Course Structure                |                                                                                                                                                                                                                                                                                           |

| Week | Hours | Unit/Module or Topic Title |                                                                                                                                          | Teaching Method                                                                          | Assessment Method                                                                                 |
|------|-------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|
| 1    | 2     | 1 <sup>st</sup> hour       | Surgical anatomy and applied physiology of the nose paranasal sinuses.                                                                   | Theoretical lectures using projectors and smart board + practical experiments and skills | Questions at the end of the theoretical lecture, and discussion with students about the lecture . |
|      |       | 2 <sup>nd</sup> hour       | Congenital malformation and injuries of the nose and paranasal sinuses. Infection of the nose and paranasal sinuses and their management |                                                                                          |                                                                                                   |
| 2    | 2     | 1st hour                   | Congenital malformation and injuries of the nose and paranasal sinuses.                                                                  |                                                                                          |                                                                                                   |
|      |       | 2nd hour                   | Infection of the nose and paranasal sinuses and their management                                                                         |                                                                                          |                                                                                                   |
| 3    | 2     | 1st hour                   | Nasal allergy and vasomotor rhinitis. Epistaxis.                                                                                         |                                                                                          |                                                                                                   |
|      |       | 2nd hour                   | Tumors of the nose and paranasal sinuses.                                                                                                |                                                                                          |                                                                                                   |
| 4    | 2     | 1st hour                   | Surgical anatomy and applied physiology of pharynx and esophagus.                                                                        |                                                                                          |                                                                                                   |
|      |       | 2nd hour                   | Inflammation of the mouth and pharynx                                                                                                    |                                                                                          |                                                                                                   |
| 5    | 2     | 1st hour                   | Ulcers. Tonsillitis and Adenoid hyper trophy.                                                                                            |                                                                                          |                                                                                                   |
|      |       | 2nd hour                   | Tonsillitis and Adenoidectomy,                                                                                                           |                                                                                          |                                                                                                   |

|    |   |                            |                                                          |  |  |
|----|---|----------------------------|----------------------------------------------------------|--|--|
|    |   |                            | indications and complications                            |  |  |
| 6  | 2 | 1st hour                   | Tumors of the nasopharynx and hypopharynx                |  |  |
|    |   | 2nd hour                   | Dysphagia. Surgical anatomy and applied of the Larynx.   |  |  |
| 7  | 2 | 1st hour                   | Congenital malformations and injuries of the Larynx.     |  |  |
|    |   | 2nd hour                   | Acute and chronic Laryngitis.                            |  |  |
| 8  |   | <b>Midterm Examination</b> |                                                          |  |  |
| 9  | 2 | 1st hour                   | Hoarseness & Stridor.                                    |  |  |
|    |   | 2nd hour                   | Tumors of the Larynx.                                    |  |  |
| 10 | 2 | 1st hour                   | Lump in the Neck.                                        |  |  |
|    |   | 2nd hour                   | Surgical anatomy of the ear –labyrinth.                  |  |  |
| 11 | 2 | 1st hour                   | Physiology of hearing and vestibular system.             |  |  |
|    |   | 2nd hour                   | Hearing impairment and audio logical assessment.         |  |  |
| 12 | 2 | 1st hour                   | Vertigo and neurological assessment                      |  |  |
|    |   | 2nd hour                   | Congenital malformation, trauma and neoplasm of the ear. |  |  |
| 13 | 2 | 1st hour                   | Otitis media Acute, chronic and secretory.               |  |  |
|    |   | 2nd hour                   | Complications of the middle ear infections               |  |  |
| 14 | 2 | 1st hour                   | Principles of middle ear surgery.                        |  |  |
|    |   | 2nd hour                   | Otosclerosis.                                            |  |  |
| 15 | 2 | 1st hour                   | B.P.P.V Meniere's disease.                               |  |  |

|  |  |          |                     |  |  |
|--|--|----------|---------------------|--|--|
|  |  | 2nd hour | Vestibular neuritis |  |  |
|--|--|----------|---------------------|--|--|

### 11.Course Evaluation

Written Exams: Multiple-choice questions (MCQs), short-answer questions (SAQs)

Clinical Exams: OSCE (Objective Structured Clinical Examination), bedside patient assessments

Practical Skills Assessment: Use of otoscope, rhinoscope, laryngoscope, and endoscopic techniques

### 12. Learning and Teaching Resources

|                                                                    |                                                                                                                 |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | 1. Scott-Brown's Otorhinolaryngology: Head and Neck Surgery<br>2.Cummings Otolaryngology: Head and Neck Surgery |
| Main references (sources)                                          |                                                                                                                 |
| Recommended books and references (scientific journals, reports...) |                                                                                                                 |
| Electronic References, Websites                                    |                                                                                                                 |

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|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| PEADIATRIC CARDIAC &HEMATOLOGY                                             |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of pediatric to the medical student in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the emergent conditions, in a way to participate in optimizing the medical services to the society                                                                                      |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Strategy</b>                                                            | *Pediatric Cardiac Diseases*: Focus on understanding congenital and acquired heart diseases, diagnostic tools, surgical and medical management, and compassionate care for children and families.<br>*Pediatric Hematology Diseases*: Emphasize knowledge of hematologic disorders, diagnostic testing, management of anemia, bleeding disorders, and malignancies, the importance of patient and family education. |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                     |

| 11. Course Structure |       |      |                                      |                                                                                          |                                                                                                      |
|----------------------|-------|------|--------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| Week                 | Hours | ILOs | Unit/Module or Topic Title           | Teaching Method                                                                          | Assessment Method                                                                                    |
| 1st                  | 1hrs. |      | Hemoglobins in the Fetus and Neonate | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture |
| 2nd                  | 1hrs. |      | Iron deficiency anemia               | //                                                                                       | //                                                                                                   |
| 3rd                  | 1hrs. |      | Hemolytic Anemias                    | //                                                                                       | //                                                                                                   |
| 4th                  | 1hrs. |      | THALASSEMIAS alfa and beta           | //                                                                                       | //                                                                                                   |
| 5th                  | 1hrs. |      | Sickle cell anemia                   | //                                                                                       | //                                                                                                   |
| 6th                  | 1hrs. |      | HEMORRHAGIC DISORDERS                | //                                                                                       | //                                                                                                   |
| 7th                  | 1hrs. |      | LEUKEMIA                             | //                                                                                       | //                                                                                                   |
| 8th                  | 1hrs. |      | NEUROBLASTOM A                       | //                                                                                       | //                                                                                                   |
| 9th                  | 1hrs. |      | Introduction of cong. Heart disease  | //                                                                                       | //                                                                                                   |
| 10th                 | 1hrs. |      | Cyanotic congenital heart disease    | //                                                                                       | //                                                                                                   |
| 11th                 | 1hrs. |      | <b>Midterm Examination</b>           | //                                                                                       | //                                                                                                   |
| 12th                 | 1hrs. |      | a Cyanotic congenital heart disease  | //                                                                                       | //                                                                                                   |
| 13th                 | 1hrs. |      | RHEUMATIC FEVER                      | //                                                                                       | //                                                                                                   |
| 14th                 | 1hrs. |      | Infective endocarditis               | //                                                                                       | //                                                                                                   |
| 15th                 | 1hrs. |      | Ventricular septal defect            | //                                                                                       | //                                                                                                   |

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|----------------------------------------------------------------------------------|-----------------------------------|
| <b>11.Course Evaluation</b>                                                      |                                   |
| Multiple choice questions , the most appropriate answer (case scenarios) quizzes |                                   |
| <b>12. Learning and Teaching Resources</b>                                       |                                   |
| Required textbooks (curricular books, if any)                                    | NELSON TEXTBOOK PEDIATRICS (2016) |
| Main references (sources)                                                        |                                   |
| Recommended books and references (scientific journals, reports...)               |                                   |
| Electronic References, Websites                                                  |                                   |

|                                                                            |                                                                                                                                                                                                                                                                                                                                |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                |
| Gynecology                                                                 |                                                                                                                                                                                                                                                                                                                                |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                |
|                                                                            |                                                                                                                                                                                                                                                                                                                                |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                |
| 15                                                                         |                                                                                                                                                                                                                                                                                                                                |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledges of gynecology to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including the emerge conditions, in a way to participate in optimizing the medical services to the society |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                |

|                 |                                                                                                                             |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------|
| <b>Strategy</b> | Interactive lectures<br>Clinical based case scenario<br>Small groups learning to solve complex medical or surgical problems |
|-----------------|-----------------------------------------------------------------------------------------------------------------------------|

## 10. Course Structure

| Week | Hours | Unit/Module or Topic Title                                   | Teaching Method                                                                          | Assessment Method                                                                                    |
|------|-------|--------------------------------------------------------------|------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|
| 1st  | 1hr   | Disease Of Vulva                                             | Theoretical lectures using projectors and smart board + practical experiments and skills | Oral questions at the end of the theoretical lecture, and discussion with students about the lecture |
| 2nd  | 1hrs. | Disease Of Vagina                                            | //                                                                                       | //                                                                                                   |
| 3rd  | 1hrs. | Urogynecology I                                              | //                                                                                       | //                                                                                                   |
| 4th  | 1hrs. | Urogynecology II                                             | //                                                                                       | //                                                                                                   |
| 5th  | 1hrs. | Genital Organ Prolapse Part I                                | //                                                                                       | //                                                                                                   |
| 6th  | 1hrs. | Genital Organ Prolapse Part II                               | //                                                                                       | //                                                                                                   |
| 7th  | 1hrs. | Contraception I                                              | //                                                                                       | //                                                                                                   |
| 8th  | 1hrs. | Contraception II                                             | //                                                                                       | //                                                                                                   |
| 9th  | 1hrs. | Common Gynecological Procedure (hysteroscopy & laparoscopy ) | //                                                                                       | //                                                                                                   |
| 10th | 1hrs. | Acute Pelvic Pain                                            | //                                                                                       | //                                                                                                   |
| 11th | 1hrs. | Chronic pelvic pain                                          | //                                                                                       | //                                                                                                   |
| 12th | 1hrs. | Premenstrual Syndrome                                        | //                                                                                       | //                                                                                                   |
| 13th | 1hrs. | Endometrial hyperplasia                                      | //                                                                                       | //                                                                                                   |
| 14th | 1hrs. | Hirsutism & virilization                                     | //                                                                                       | //                                                                                                   |
| 15th | 1hrs. | Congenital abnormalities of genital tract                    | //                                                                                       | //                                                                                                   |

## 11. Course Evaluation

Multiple choice questions the most appropriate answer (case scenarios)  
quizzes

## 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                                  |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <ul style="list-style-type: none"> <li>•Dewhurst's Textbook of Obstetrics Gynaecology, 9th Edition By Keith Edmond</li> <li>•Gynecology By Ten Teachers, 21th Edition</li> </ul> |
| Main references (sources)                                          |                                                                                                                                                                                  |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                  |
| Electronic References, Websites                                    |                                                                                                                                                                                  |

### 1. Course Name:

Surgical specialties and surgical emergency

### 2. Course Code:

### 3. Semester / Year:

2<sup>nd</sup> semester / 5<sup>th</sup> year

### 4. Description Preparation Date:

11/5/2025

### 5. Available Attendance Forms:

5<sup>th</sup> stage students

### 6. Number of Credit Hours (Total) / Number of Units (Total) :

30

### 7. Course administrator's name (mention all, if more than one name)

Name:

### 8. Course Objectives

|                          |                                                                                                                                                                                                                                                                                                                                                                                                         |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Course Objectives</b> | <p>The course is designed to enable the student to:</p> <ol style="list-style-type: none"> <li>1.Will be oriented about variable surgical emergencies, their management, and complication.</li> <li>2.How to deal with traumatized patients</li> </ol> <p>Will be oriented about variable surgical specialties such as pediatrics surgery ,faciomaxillary surgery ,plastic surgery &amp; anesthesia</p> |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

### 9. Teaching and Learning Strategies

|                 |                                                                                                                                            |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Strategy</b> | <p>Interactive lectures</p> <p>Clinical based case scenario</p> <p>Small groups learning to solve complex medical or surgical problems</p> |
|-----------------|--------------------------------------------------------------------------------------------------------------------------------------------|

### 10. Course Structure

| Date                  | Theory Title                                                                                                                                                     | Specialty          |
|-----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| 1 <sup>st</sup> Week  | 1. Oral Cavity & The Tongue<br>2. Salivary Glands                                                                                                                | Head & Neck        |
| 2 <sup>nd</sup> Week  | 3. Neck Mass<br>4. Cervical Lymphadenopathy                                                                                                                      |                    |
| 3 <sup>rd</sup> Week  | 5. Investigation Of Breast Disease.<br>6. Breast Anomalies And Inflammatory Diseases                                                                             | Breast Surgery     |
| 4 <sup>th</sup> Week  | 7. Benign Breast Tumours<br>8. Management Of Breast Cancer                                                                                                       |                    |
| 5 <sup>th</sup> Week  | 9. Principles Of Anaesthesia, Types Of Anesthesia<br>10. Local & Regional Anaesthesia, Mode Of Action                                                            | Anesthesiology     |
| 6 <sup>th</sup> Week  | 11. GA: Pre-Medication, Induction, Maintenance & Recovery<br>12. Monitoring Tools, End Tracheal Intubation , Regional Anesthesia Indications & Contraindications |                    |
| 7 <sup>th</sup> Week  | 13. Recovery Room, Post Operative Care , Post Operative Complications<br>14. Intensive Care Unit, Pediatric Anesthesia                                           |                    |
| 8 <sup>th</sup> Week  | 15. Burn Injuries<br>16. Pressure Sore, Skin Graft & Flaps                                                                                                       | Plastic Surgery    |
| 9 <sup>th</sup> Week  | 17. The Aetiology And Classification Of Cleft Lip And Palate<br>18. The Principles Of Reconstruction Of Cleft Lip And Palate                                     |                    |
| 10 <sup>th</sup> Week | <b>Midterm Examination</b>                                                                                                                                       | Pediatrics Surgery |
| 11 <sup>th</sup> Week | 19. Principles & Perioperative Care In Paediatric Surgery<br>20. Inguinoscrotal Disorders                                                                        |                    |
| 12 <sup>th</sup> Week | 21. Paediatric Urology<br>22. Pediatric GIT Paediatric Disorders                                                                                                 |                    |

|                             |                                                                                                               |                    |
|-----------------------------|---------------------------------------------------------------------------------------------------------------|--------------------|
| <b>13<sup>th</sup> Week</b> | 23. Anorectal Region Disorders And Congenital Anomalies<br>24. Congenital Malformations Of Respiratory System |                    |
| <b>14<sup>th</sup> Week</b> | Surgical emergencies                                                                                          | Surgical emergency |
| <b>15<sup>th</sup> Week</b> | Surgical emergencies                                                                                          |                    |

## 11. Course Evaluation

Multiple choice questions the most appropriate answer (case scenarios) quizzes

## 12. Learning and Teaching Resources

|                                                                    |                                                    |
|--------------------------------------------------------------------|----------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Baily and Love's Textbook / Short Practice Surgery |
| Main references (sources)                                          |                                                    |
| Recommended books and references (scientific journals, reports...) |                                                    |
| Electronic References, Websites                                    |                                                    |

### 1. Course Name:

dermatology

### 2. Course Code:

### 3. Semester / Year:

2<sup>nd</sup> semester / 5<sup>th</sup> year

### 4. Description Preparation Date:

11/5/2025

### 5. Available Attendance Forms:

5<sup>th</sup> stage students

### 6. Number of Credit Hours (Total) / Number of Units (Total) :

30

### 7. Course administrator's name (mention all, if more than one name)

Name:

### 8. Course Objectives

#### Course Objectives

The aim of the dermatology course is to equip medical students with the fundamental knowledge and clinical skills necessary to recognize, diagnose, and manage common dermatological conditions. This includes:

|                                     |                                                                                                                                                                                                                                                                                                         |
|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                     | <p>1. Understanding Skin Anatomy and Physiology.</p> <p>2. Recognizing Common Skin Diseases: clinical presentations of dermatological disorders &amp; differentiating between benign and malignant skin lesions.</p> <p>3. Developing Diagnostic Skills.</p>                                            |
| 9. Teaching and Learning Strategies |                                                                                                                                                                                                                                                                                                         |
| <b>Strategy</b>                     | <ul style="list-style-type: none"> <li>• Lectures: Covering core dermatology topics, delivered by specialists.</li> <li>• Case-Based Learning (CBL): Discussion of real-life clinical cases.</li> <li>• Problem-Based Learning (PBL): Small-group sessions focusing on diagnostic reasoning.</li> </ul> |
| 10. Course Structure                |                                                                                                                                                                                                                                                                                                         |

| Week | Hours | Unit/Module or Topic Title                                                                                        | Teaching Method | Assessment Method |
|------|-------|-------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|
| 1    | 2     | 1. Functional Anatomy & Physiology of skin.<br>2. History & Examination of Skin.                                  |                 |                   |
| 2    | 2     | 3. Terminology in skin diseases.<br>4. Investigations of Skin Diseases.                                           |                 |                   |
| 3    | 2     | 5. Presenting problems in skin diseases I<br>6. Presenting problems in skin diseases II.                          |                 |                   |
| 4    | 2     | 7. Dermatologic therapeutics I<br>8. Dermatologic therapeutics II                                                 |                 |                   |
| 5    | 2     | 9. Common skin infections and infestations I<br>10. Common skin infections and infestations II                    |                 |                   |
| 6    | 2     | 11. Sexually transmitted diseases I<br>12. Sexually transmitted diseases II                                       |                 |                   |
| 7    | 2     | 13. Acne and rosacea.<br>14. Eczemas.                                                                             |                 |                   |
| 8    | 2     | Midterm Exam                                                                                                      |                 |                   |
| 9    | 2     | 15. Psoriasis and other erythematous scaly eruptions I<br>16. Psoriasis and other erythematous scaly eruptions II |                 |                   |
| 10   | 2     | 17. Lichen planus and lichenoid eruptions.<br>18. Lichen planus and lichenoid eruptions.                          |                 |                   |
| 11   | 2     | 19. Urticaria.<br>20. Bullous diseases.                                                                           |                 |                   |
| 12   | 2     | 21. Pigmentation disorders.<br>22. Drugs & drug reactions                                                         |                 |                   |
| 13   | 2     | 23. Hair Disorders.<br>24. Nail Disorders.                                                                        |                 |                   |
| 14   | 2     | 25. Skin Tumors 1.<br>26. Skin Tumors 2.                                                                          |                 |                   |
| 15   | 2     | 27. Skin in systemic diseases 1.<br>28. Skin in systemic diseases 1.                                              |                 |                   |

### 11.Course Evaluation

- MCQs/Quizzes: Periodic short tests to assess theoretical knowledge.
- Multiple-choice and short-answer questions on dermatological diseases and treatments.

## 12. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <ul style="list-style-type: none"> <li>•Fitzpatrick's Dermatology in General Medicine Klaus Wolff et al.</li> <li>•Rook's Textbook of Dermatology – Christoph Griffiths et al.</li> <li>•Andrews' Diseases of the Skin: Clinical Dermatology – William D. James et al.</li> </ul> |
| Main references (sources)                                          |                                                                                                                                                                                                                                                                                   |
| Recommended books and references (scientific journals, reports...) |                                                                                                                                                                                                                                                                                   |
| Electronic References, Websites                                    |                                                                                                                                                                                                                                                                                   |

|                                                                                          |                           |
|------------------------------------------------------------------------------------------|---------------------------|
| المؤسسة التعليمية                                                                        | جامعة الفلوجة – كلية الطب |
| القسم العلمي/المركز                                                                      | فرع الباطنية              |
| اسم /رمز المقرر                                                                          | الأخلاق الطبية            |
| اشكال الحضور المتاحة                                                                     | حضور                      |
| الفصل/السنة                                                                              | 2023-2024                 |
| عدد الساعات الدراسية (الكلية)                                                            | ١٥                        |
| تاريخ اعداد هذا الوصف                                                                    | 11/5/2025                 |
| أهداف المقرر                                                                             |                           |
| ١) مفهوم الأخلاقيات الطبية: تعريفها، أهميتها، وتأثيرها على الممارسة المهنية.             |                           |
| ٢) الصفات الأخلاقية للطبيب: القيم المطلوبة لضمان ثقة المرضى وجودة الرعاية.               |                           |
| ٣) تاريخ أخلاقيات الطب: تطورها عبر الحضارات ودور الإسلام في ترسيخها.                     |                           |
| ٤) مسؤوليات الطبيب: تجاه المرضى والمجتمع، وأخلاقيات التقارير الطبية والشهادات.           |                           |
| ٥) السلوكيات الطبية: تنظيم علاقة الطبيب بزملائه والمجتمع، وآداب الاستشارات.              |                           |
| ٦) المسؤولية الطبية: تأثيرها على التشخيص والعلاج، وأخلاقيات الممارسة المهنية.            |                           |
| ٧) الأخلاقيات القانونية: الإجهاض، نقل الأعضاء، واحترام جثة الميت.                        |                           |
| ٨) القوانين الطبية: قوانين مزاولة المهنة، تسجيل الولادات والوفيات، والشهادة أمام القضاء. |                           |
| ٩) أخلاقيات البحث الطبي: الضوابط الأخلاقية في التجارب السريرية وأبحاث الوراثة.           |                           |
| ١٠) التعامل مع المرضى: تحسين التواصل واتخاذ القرارات الطبية بأخلاقيات مهنية.             |                           |
| ١١) سرية المعلومات: أهمية السرية الطبية وضوابط الإفشاء عند الضرورة.                      |                           |
| ١٢) أخلاقيات التخصصات الطبية: الجراحة، الأمراض النفسية، وطب النساء والتوليد.             |                           |
| ١٣) الأخطاء الطبية: أسبابها، تجنبها، والمسؤوليات القانونية المرتبطة بها.                 |                           |
| ١٤) القسم الطبي: دراسة قسم أبقراط وأثره في تعزيز أخلاقيات المهنة.                        |                           |

١٥) مواكبة التطورات :التزام الطبيب بالأخلاقيات عند التعامل مع التطورات الطبية.

١٠. بنية المقرر

| الاسبوع | ١<br>لساعات | مخرجات التعلم المطلوبة                                                                                                                                                                                                                        | اسم الوحدة /الموضوع                      | طريقة التعليم    | طريقة<br>التقييم |
|---------|-------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|------------------|------------------|
|         | 1           | ١. تعريف الأخلاقيات الطبية وأثرها على الممارسة المهنية.<br>٢. إبراز الصفات المطلوبة لطالب الطب والطبيب.<br>٣. دراسة القيم الأخلاقية التي تضمن ثقة المرضى وجودة الرعاية الصحية.                                                                | مفهوم الأخلاقيات الطبية وأهميتها         | محاضرات          | امتحان يومي      |
|         | 1           | ١. معرفة دور الحضارة العربية في تطوير الطب وأخلاقياته.<br>٢. معرفة أهم الإنجازات الطبية والعلمية التي ساهم بها العلماء العرب.<br>٣. معرفة المبادئ الأخلاقية التي اتبعها الأطباء العرب وتأثيرها على الطب الحديث.                               | تأريخ الطب وأخلاقياته في الحضارة العربية | محاضرات          | نقاش             |
|         | 1           | ١. فهم القواعد الأساسية لمزاولة المهنة وأخلاقياتها.<br>٢. توضيح مسؤوليات الطبيب تجاه المرضى والمجتمع.<br>٣. دراسة أخلاقيات الإعلان الطبي، التقارير الطبية، وشهادات الوفاة.<br>٤. توضيح العلاقة بين الطبيب والقضاء والشرطة في القضايا العدلية. | مهنة الطب والمسؤوليات المهنية            | محاضرات          | امتحان يومي      |
|         | 1           | ١. تنظيم علاقة الطبيب بزملائه والمجتمع.<br>٢. مناقشة آداب الاستشارات الطبية والتعاون بين الأطباء.                                                                                                                                             | السلوكيات الطبية وعلاقات الطبيب          | محاضرات ومناقشات | امتحان يومي      |
|         | 1           | ١. تحليل مفهوم المسؤولية الطبية وأثرها على التشخيص والعلاج.<br>٢. مناقشة القضايا الأخلاقية مثل الموت الرحيم والإضرار عن الطعام.<br>٣. مواكبة التطورات الطبية وتجنب الأخطاء المهنية.                                                           | المسؤولية الطبية وأخلاقيات الممارسة      | محاضرات          | نقاش             |

|              |                |                                               |   |   |                                                                                                                                                                                                                                                                                                                     |
|--------------|----------------|-----------------------------------------------|---|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| امتحان مفاجئ | محاضرات        | العلاقة بين الطبيب المعالج والطبيب العدلي     | 1 | 1 | معرفة الأخلاقيات القانونية المتعلقة بالإجهاض، نقل الأعضاء، واحترام جثة الميت.                                                                                                                                                                                                                                       |
|              | محاضرات        | القوانين المنظمة لمهنة الطب                   | 1 | 1 | التعرف على قوانين نقابة الأطباء، تسجيل الولادات والوفيات، والشهادة أمام المحاكم.                                                                                                                                                                                                                                    |
| نقاش         | محاضرات        | أخلاقيات البحث الطبي والتجارب السريرية        | 1 | 1 | ١. معرفة الضوابط الأخلاقية في البحوث الطبية والتجارب على الإنسان.<br>٢. معرفة أخلاقيات الوراثة الطبية والأخلاقيات البيوطبية.                                                                                                                                                                                        |
| نقاش         | محاضرات        | أخلاقيات التعامل مع المرضى                    | 1 | 1 | ١. تعزيز التواصل الإيجابي بين الطبيب والمريض.<br>٢. فهم القيم الأخلاقية في اتخاذ القرارات الطبية.                                                                                                                                                                                                                   |
| نقاش         | محاضرات        | سرية المعلومات الطبية                         | 1 | 0 | معرفة أهمية السرية الطبية ومبررات إفشاء السر الطبي                                                                                                                                                                                                                                                                  |
| نقاش         | محاضرات        | الجوانب الأخلاقية في التخصصات الطبية المختلفة | 1 | 1 | ١. دراسة الأخلاقيات الخاصة بالجراحة، الفحوص الشعاعية، والأمراض النفسية.<br>٢. تحليل القضايا الأخلاقية في طب النساء والتوليد.                                                                                                                                                                                        |
| امتحان يومي  | محاضرات        | الأخطاء الطبية والمسؤوليات القانونية          | 1 | 2 | ١. التعرف على أسباب الأخطاء الطبية وكيفية تجنبها.<br>٢. دراسة الجوانب القانونية والأخلاقية المتعلقة بالممارسات الطبية.                                                                                                                                                                                              |
| نقاش         | محاضرات        | الأطباء والانتخابات المهنية                   | 1 | 3 | ١. توضيح أهمية الانتخابات المهنية للأطباء في تطوير القطاع الصحي.<br>٢. تسليط الضوء على دور الأطباء في المجالس والنقابات الطبية.                                                                                                                                                                                     |
| نقاش         | محاضرات        | واجبات الطبيب وفن التعامل مع المريض           | 1 | 3 | ١. التعرف على الواجبات المهنية والأخلاقية للطبيب.<br>٢. فهم أهمية العلاقة بين الطبيب والمريض وأثرها على جودة الرعاية الصحية.                                                                                                                                                                                        |
| نقاش         | محاضرات + نقاش | القواعد الجراحية وأخلاقيات مهنة الطب          | 1 | 4 | ١. التعرف على المبادئ الأساسية للجراحة والقواعد العامة أثناء العمليات.<br>٢. فهم أهمية التعقيم وتقنيات الجراحة الآمنة.<br>٣. إدراك مسؤوليات الجراح وحقوق المرضى وفقاً لأخلاقيات المهنة.<br>٤. معرفة القوانين والتشريعات التي تحكم الممارسة الجراحية.<br>٥. مناقشة الحالات الأخلاقية والتحديات التي يواجهها الجراحون |
| امتحان       | محاضرات        | القسم الطبي وأخلاقيات المهنة                  | 1 | 5 | ١. دراسة قسم أبقراط وأثره على الممارسة الطبية.<br>٢. ترسيخ القيم الأخلاقية في السلوك المهني للطبيب                                                                                                                                                                                                                  |

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|                                                                                                                                                                                                                                                                                                                                                                                                   |  |  |  |                              |  |
| ١١. المراجع والمصادر                                                                                                                                                                                                                                                                                                                                                                              |  |  |  |                              |  |
| <b>Medical Ethics: Principles and Values</b><br>(الأخلاق الطبية: مبادئ وقيم) للعالم جيمس إلين                                                                                                                                                                                                                                                                                                     |  |  |  | الكتب المقررة المطلوبة       |  |
| الأخلاقيات الطبية في العالم المعاصر للعالم ماري كارتر                                                                                                                                                                                                                                                                                                                                             |  |  |  | المراجع الرئيسية             |  |
| عبد الله النمري (أخلاقيات الطب في الفكر الإسلامي) د.                                                                                                                                                                                                                                                                                                                                              |  |  |  | الكتب والمراجع التي يوصى بها |  |
| تقدم المنظمة إرشادات عالمية حول الأخلاقيات الطبية، بما في ذلك إرشادات (WHO) منظمة الصحة العالمية للباحثين والأطباء حول كيفية التعامل مع القضايا الأخلاقية في الطب.<br>(The National Bioethics Advisory Commission) اللجنة الوطنية الأمريكية للأخلاقيات البيولوجية:<br>تقدم هذه اللجنة أبحاثًا وتقارير تتناول الجوانب الأخلاقية في الطب الحديث، بما في ذلك أخلاقيات الأبحاث الطبية والعلاج الجيني. |  |  |  | ب- المراجع الالكترونية       |  |

# Clinical

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|---------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                   |
| Clinical psychiatry                                                 |                                                                                                                                                                                                                                                                                                   |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                   |
|                                                                     |                                                                                                                                                                                                                                                                                                   |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                   |
| 1 <sup>st</sup> semester / 5 <sup>th</sup> year                     |                                                                                                                                                                                                                                                                                                   |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                   |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                                                                   |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                   |
| 5 <sup>th</sup> stage students                                      |                                                                                                                                                                                                                                                                                                   |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                                                                   |
| 45                                                                  |                                                                                                                                                                                                                                                                                                   |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                   |
| Name:                                                               |                                                                                                                                                                                                                                                                                                   |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                   |
| Course Objectives                                                   | It allows the candidate to be a good educational source in his university or community, have communication skills, team work concept, take decisions, and manage information, oriented with community and environmental development always takes the moral standards and the professional ethics. |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                   |
| Strategy                                                            | Direct interview with the patients and explanation                                                                                                                                                                                                                                                |
| 10. Course Structure                                                |                                                                                                                                                                                                                                                                                                   |

|           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|-----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Session 1 | <b>Introduction</b> <ol style="list-style-type: none"> <li>1.Assessment of clinical expertise (ACE)</li> <li>2.Mini-assessed clinical encounter (mini-ACE)</li> <li>3.Case-based discussion (CbD)</li> <li>4.Case presentation (CP)</li> <li>5.Direct observation of procedural skills (DOPS)</li> </ol>                                                                                                                                                                                                                                                                                                       |
| Session 2 | <b>History taking and mental state examination</b><br>How to take a history                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Session 3 | <b>Physical examination</b> <ol style="list-style-type: none"> <li>1.Aims of routine physical examination</li> <li>2.General examination</li> <li>3.Specific system examinations</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Session 4 | <b>Diagnosis and differential diagnoses</b> <ol style="list-style-type: none"> <li>1.Diagnosis</li> <li>2.Differential diagnosis</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| Session 5 | <b>Etiological formulation</b> <ol style="list-style-type: none"> <li>1.Commonly identified etiological factors</li> <li>2.Schizophrenia</li> <li>3.Depression</li> <li>4.Mania</li> <li>5.Anorexia nervosa</li> <li>6.Alcoholism</li> <li>7.post-traumatic stress disorder</li> <li>8.Alzheimer's dementia</li> <li>9.Vascular dementia</li> </ol>                                                                                                                                                                                                                                                            |
| Session 6 | <b>Investigations</b> <ol style="list-style-type: none"> <li>1.Physical investigations</li> <li>2.Psychological investigations</li> <li>3.Social investigations</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Session 7 | <b>Management plan</b> <ol style="list-style-type: none"> <li>1.Immediate/short-term management</li> <li>2.Long-term management</li> <li>3.Schizophrenia</li> <li>4.Depression</li> <li>5.Bipolar affective disorder</li> <li>6.Alcohol misuse and dependence</li> <li>7.Opioid misuse and dependence</li> <li>8.Old age (psychosis, depression and dementia)</li> <li>9.Obsessive–compulsive disorder</li> <li>10.anxiety disorder and phobias</li> <li>11.post-traumatic stress disorder</li> <li>12.eating disorders – anorexia, and bulimia nervosa</li> <li>13.borderline personality disorder</li> </ol> |
| Session 8 | <b>Prognosis</b> <ol style="list-style-type: none"> <li>1.Schizophrenia</li> <li>2.schizoaffective disorder</li> <li>3.Mood disorders</li> <li>4 Drug and alcohol misuse</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                            |

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|            | 5.Obsessive–compulsive disorder<br>6.eating disorders<br>7.Alzheimer’s dementia                                                                                                                                                                                                                                                                       |
| Session 9  | <b>Tasks for mini assessed clinical encounters (mini-ACEs)</b><br>1.Eliciting symptoms of depression and suicidality<br>2.Eliciting manic/hypomanic symptoms<br>3.Eliciting history of hallucinations<br>4.Eliciting details of delusions and abnormal experiences<br>5.Assessing first rank symptoms of schizophrenia<br>6.Eliciting alcohol history |
| Session 10 | 1.Assessing complications of alcohol misuse and assessing motivation<br>2.Eliciting illicit drug history<br>3.Eliciting history of anxiety symptoms, panic attacks and phobias<br>4.Eliciting details of obsessive–compulsive symptoms<br>5.Eliciting post-traumatic stress disorder history<br>6.Eliciting eating disorder history                   |
| Session 11 | 1.Assessing insight<br>2.Eliciting history of premorbid personality                                                                                                                                                                                                                                                                                   |
| Session 12 | 1.Frontal lobe function testing<br>2.Suicide risk assessment<br>3.Violence-risk assessment                                                                                                                                                                                                                                                            |
| Session 13 | <b>Dementia – history taking (collateral information)</b><br>1.Mini mental state examination<br>2.Detailed cognitive examination                                                                                                                                                                                                                      |
| Session 14 | <b>Direct observation of procedural skills (DOPS)</b><br>1.Electroconvulsive therapy administration<br>2.Cardiopulmonary resuscitation (basic life support)<br>3.Extrapyramidal side effects – physical examination                                                                                                                                   |
| Session 15 | <b>Sub-specialties</b><br>1.Child psychiatry<br>2.Learning disability                                                                                                                                                                                                                                                                                 |

| 11.Course Evaluation                                                  |                                       |
|-----------------------------------------------------------------------|---------------------------------------|
| Oral exam                                                             |                                       |
| 12. Learning and Teaching Resources                                   |                                       |
| Required textbooks (curricular books, if any)                         | Pocket Kaplan of psychiatry text book |
| Main references (sources)                                             |                                       |
| Recommended books and references<br>(scientific journals, reports...) |                                       |
| Electronic References, Websites                                       |                                       |

|                                                                            |                                                                                                                                                                                                                                                                                                                                   |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                   |
| Pediatric surgery                                                          |                                                                                                                                                                                                                                                                                                                                   |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                   |
|                                                                            |                                                                                                                                                                                                                                                                                                                                   |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                   |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                   |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                   |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                   |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                   |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                   |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                   |
| 45                                                                         |                                                                                                                                                                                                                                                                                                                                   |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                   |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                   |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                   |
| <b>Course Objectives</b>                                                   | The course describes the basic knowledge of pediatric surgical cases to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different surgical diseases in children, in a way to participate in optimizing the medical services to the society. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                   |
| <b>Strategy</b>                                                            | The course is designed to enable the student to:<br>1. Will be oriented about variable surgical emergencies, their management, and complication.<br>2. How to deal with surgical cases in child patients.<br>3. Will be oriented about congenital and acquired surgical case.                                                     |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                   |

| 11. Course Structure |                                                                                                                                                                                                                                                                          |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Session 1            | Introduction to pediatric surgery (Definition of pediatric surgery, Requirements for pediatric surgical services, Anatomical differences of pediatric patient from adult patient, calculation of fluid requirement (amount & rate), thermoregulation, and Pain control). |
| Session 2            | Esophageal disease (gastroesophageal disease, achalasia, radiological investigation of esophagus).                                                                                                                                                                       |
| Session 3            | Esophageal disease (Tracheo-oesophageal Fistula diagnosis                                                                                                                                                                                                                |

|            |                                                                                                                                                     |
|------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
|            | and management).                                                                                                                                    |
| Session 4  | Thoracic surgical disease (Congenital Diaphragmatic Hernia” diagnosis and management”).                                                             |
| Session 5  | Stomach disease (vomiting (bilious or non-bilious), pyloric stenosis).                                                                              |
| Session 6  | Neonatal intestinal obstruction (Hirschsprung disease and its management)                                                                           |
| Session 7  | Neonatal intestinal obstruction meconium Ileus and its management, Duodenal obstruction, jejunoileal atresia and stenosis                           |
| Session 8  | Intussusception (pathophysiology, Primary and secondary Intussusception, clinical presentation, diagnosis, management (operative or non-operative)) |
| Session 9  | Inguinoscrotal surgical disease (inguinal hernia, hydrocele, undescended testes).                                                                   |
| Session 10 | Disease of scrotum (acute scrotum, testicular torsion, epididymo_orchitis)                                                                          |
| Session 11 | Congenital and anorectal malformations (imperforated anus in male and female )                                                                      |
| Session 12 | acquired anorectal malformations anal fissure, fistula in ano, perianal and perirectal abscess and rectal prolapse.                                 |
| Session 13 | Clinical case presentation and how to deal the surgical cases                                                                                       |
| Session 14 | Radiological finding view on data show like erect abdomen x-ray finding, upper and lower contrast study.                                            |
| Session 15 | Intraoperative finding through the presence of student the different operation in operative room                                                    |

| 11.Course Evaluation                                                  |                                                                                                  |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|
| Multiple choice questions<br>quizzes                                  |                                                                                                  |
| 12. Learning and Teaching Resources                                   |                                                                                                  |
| Required textbooks (curricular books, if any)                         | 1.Baily and Love’s Textbook / Short Practice Surgery<br>2.Holcomb and Ashcraft pediatric surgery |
| Main references (sources)                                             |                                                                                                  |
| Recommended books and references<br>(scientific journals, reports...) |                                                                                                  |
| Electronic References, Websites                                       |                                                                                                  |

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|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                |
| Urology                                                                    |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                |
| 45                                                                         |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Course Objectives</b>                                                   | The course describes the basic clinical knowledges of urology to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including , stone diseases , urinary tract infections and emergent conditions, in a way to partici in optimizing the medical services to the society |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                |
| <b>Strategy</b>                                                            | Clinical sessions in urology outpatient clinic .<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                                                                                                       |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                |

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|----------------------------------------------------------------------------------------------------------------|
| <b>11. Course Structure:</b>                                                                                   |
| Clinical training in urology                                                                                   |
| Session 1:                                                                                                     |
| Introduction                                                                                                   |
| History taking in urology                                                                                      |
| Physical examination in urology                                                                                |
| Investigations ( laboratory, imaging, and others)                                                              |
| Session 2:                                                                                                     |
| Urinary stone diseases: presentation, differential diagnosis, investigations, treatment options, complications |
| Renal colic: management                                                                                        |
| Session 3:                                                                                                     |
| Uroradiology: imaging studies in urology (ultrasound-KUB-IVU-CT- scan)                                         |

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| <p>Session 4:</p> <p>Urinary tract infections</p> <p>Pyelonephritis</p> <p>Pyonephrosis</p> <p>Renal abscess</p> <p>Cystitis</p> <p>Urethritis</p> <p>Specific infections of urinary tract (TB. Belharziasis)</p>                                                   |
| <p>Session 5:</p> <p>Upper urinary tract injuries (blunt and penetrating): management</p> <p>Lower urinary tract injuries: bladder and urethral injuries management</p>                                                                                             |
| <p>Session 6:</p> <p>Hematuria: Definition, types, causes</p> <p>Renal tumors: management: management: etiology presentation, differential diagnosis, investigations, staging, treatment options, complications</p>                                                 |
| <p>Session 7:</p> <p>Bladder tumors: management: etiology presentation, differential diagnosis, investigations, staging, treatment options, complications</p>                                                                                                       |
| <p>Session 8:</p> <p>Scrotal pathologies</p> <p>Painful: torsion of testis, epididymoorchitis, scrotal traumas, Forneirs gangrene</p> <p>Painless scrotal pathologies: hydrocele, varicocele, epididymal cyst, spermatocele, testicular tumors, inguinal hernia</p> |
| <p>Session 9:</p> <p>Bladder outlet obstruction</p> <p>benign prostatic hyperplasia</p> <p>prostatic carcinoma</p> <p>digital rectal examination</p> <p>urethral stricture</p>                                                                                      |
| <p>Session 10:</p> <p>Foleys catheters: definition, types, indications, contraindications, complication</p>                                                                                                                                                         |

| 11.Course Evaluation                          |                                                                                                                                                                                                          |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clinical oral exam                            |                                                                                                                                                                                                          |
| 12. Learning and Teaching Resources           |                                                                                                                                                                                                          |
| Required textbooks (curricular books, if any) | <p>1.Baily and Love's Textbook / Short Practice Surgery</p> <p>2.Smith's General Urology</p> <p>3.Harrison's Principles of Internal Medicine</p> <p>4.Davidson's Principles and Practice of Medicine</p> |
| Main references (sources)                     |                                                                                                                                                                                                          |
| Recommended books and references              |                                                                                                                                                                                                          |

|                                   |  |
|-----------------------------------|--|
| (scientific journals, reports...) |  |
| Electronic References, Websites   |  |

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|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Clinical neurology/neurosurgery                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 45                                                                         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Course Objectives</b>                                                   | The aim of a clinical course for undergraduate medical students with the listed content is to provide a comprehensive foundation in clinical neuroscience, with focus on the diagnosis, management, and understanding of common neurologic disorders and related clinical skills. The course is designed to equip students the knowledge and practical skills necessary to evaluate and manage patients neurological conditions, interpret diagnostic imaging, and understand basic neurosurgical procedures. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>Strategy</b>                                                            | Clinical Rotations: Hands-on experience in neurology and neurosurgery was outpatient clinics, and emergency departments.<br>Case-Based Learning: Discussion of real or simulated cases to enhance diagnostic and management skills.                                                                                                                                                                                                                                                                           |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

| Week | Unit/Module or Topic Title     |
|------|--------------------------------|
| 1    | Clinical anatomy               |
| 2    | Clinical examination           |
| 3    | approach to Headache Disorders |
|      | Cerebrovascular Disorders      |

|  |                                                          |
|--|----------------------------------------------------------|
|  | Epilepsy<br>Movement Disorder<br>Neuromuscular Disorders |
|  | Dizziness and Vertigo                                    |
|  | Glasco coma scale                                        |
|  | Reading CT scan                                          |
|  | Reading MRI                                              |
|  | Craniotomy set                                           |
|  | Ventriculo and lumbo peritoneal shunt                    |

| 11.Course Evaluation                                                  |  |
|-----------------------------------------------------------------------|--|
| Clinical oral exam                                                    |  |
| 12. Learning and Teaching Resources                                   |  |
| Required textbooks (curricular books, if any)                         |  |
| Main references (sources)                                             |  |
| Recommended books and references<br>(scientific journals, reports...) |  |
| Electronic References, Websites                                       |  |

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|----------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                             |
| Clinical Thoracic Surgery                                                  |                                                                                                                                                                                                                                                                                             |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                             |
|                                                                            |                                                                                                                                                                                                                                                                                             |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                             |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                                             |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                             |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                             |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                             |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                             |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                             |
| 45                                                                         |                                                                                                                                                                                                                                                                                             |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                             |
| Name:                                                                      |                                                                                                                                                                                                                                                                                             |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                             |
| <b>Course Objectives</b>                                                   | The course describes the basic clinical knowledge of thoracic surgery to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases including , chest vascular and cardiac surgical diseases. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                             |
| <b>Strategy</b>                                                            | Clinical sessions in thoracic outpatient clinic .<br>Case based learning to solve patient problem<br>Small group teaching                                                                                                                                                                   |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                             |

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| Clinical training in thoracic surgery                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Session 1:</b><br>Introduction<br>History taking in thoracic surgery.<br>Physical examination in thoracic surgery.<br>Investigations and breathing assessment ( laboratory, imaging, and others)<br><b>Session 2:</b> Congenital anomalies : presentation, differential diagnosis, investigations, treatment options, complications<br><b>Session 3:</b> pneumothorax including tension pneumothorax.<br><b>Session 4:</b> pleural effusion and hemothorax.<br><b>Session 5:</b> empyema and chylothorax<br><b>Session 6:</b> bronchiectasis<br><b>Session 7:</b> lung abscess.<br><b>Session 8:</b> surgical aspect of pulmonary TB.<br><b>Session 9:</b> pericardial effusion and tamponade. |

**Session 10** : chest trauma  
**Session 11** : bronchogenic carcinoma approach.  
**Session 12** :surgical treatment of lung cancer.  
**Session 13** : DVT and its complication  
**Session 14** : acute arterial occlusion  
**Session 15**: chronic vascular insufficiency.

| 11.Course Evaluation                                                  |                                             |
|-----------------------------------------------------------------------|---------------------------------------------|
| Clinical oral exam                                                    |                                             |
| 12. Learning and Teaching Resources                                   |                                             |
| Required textbooks (curricular books, if any)                         | Short practice of surgery by Baily and Love |
| Main references (sources)                                             |                                             |
| Recommended books and references<br>(scientific journals, reports...) |                                             |
| Electronic References, Websites                                       |                                             |

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|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                     |
| Clinical orthopedics and fractures                                  |                                                                                                                                                                                                                                                     |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                     |
|                                                                     |                                                                                                                                                                                                                                                     |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                     |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                     |                                                                                                                                                                                                                                                     |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                     |
| 11/5/2025                                                           |                                                                                                                                                                                                                                                     |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                     |
| 5 <sup>th</sup> stage students                                      |                                                                                                                                                                                                                                                     |
| 6. Number of Credit Hours (Total) / Number of Units (Total) :       |                                                                                                                                                                                                                                                     |
| 45                                                                  |                                                                                                                                                                                                                                                     |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                     |
| Name:                                                               |                                                                                                                                                                                                                                                     |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                     |
| Course Objectives                                                   | The course describes the basic clinical knowledge of Clinical orthopedics and fractures to the medical students in order to build the clinical knowledge and clinical skills in the next years in diagnosis and treatment of the different diseases |

|                                            |                                                                                                                                            |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------|
|                                            | including , emergency orthopedics and fractures conditions in a way to participate in optimizing the medical services to the society       |
| <b>9. Teaching and Learning Strategies</b> |                                                                                                                                            |
| <b>Strategy</b>                            | Clinical sessions in outpatient orthopedics and fractures clinic .<br>Case based learning to solve patient problem<br>Small group teaching |
| <b>10. Course Structure</b>                |                                                                                                                                            |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Clinical training in orthopedics and fractures                                                                                                                                              |
| Session 1:<br>Introduction<br>History taking<br>Physical examination<br>Investigations ( laboratory, imaging, and others)                                                                   |
| Session 2:<br>Different conditions in orthopedics and fractures present in out patient clinic: presentation, differential diagnosis, investigations, treatment options, complications       |
| Session3:<br>Hand skill : include fractures management ; reduction of fractures, cast applications, wound suturing and management,                                                          |
| Session 4:<br>Orthopedic cases management such as; DDH, and other orthopedic hip problems                                                                                                   |
| Session 5:<br>Knees problems management such as: knee sports injuries, patellar over load syndrome, rheumatoid and osteoarthritis., and tumors.                                             |
| Session 6:<br>foot problems managements such as: club foot managements, etiology, presentation, differential diagnosis, investigation, treatment options ,and complications,                |
| Session 7:<br>spine problems such as: spinal pain causes, disc prolapsed, spondylosis, spondylolisthesis, retrolisthesis, fractures, infections, tumors, congenital and structural defects. |
| Session 8:<br>Shoulder problems such as:<br>Fractures, fractures and dislocations, complications associated with managements and congenital abnormalities.                                  |
| Session 9:<br>Elbow problems such as: fractures, pulled elbow, fractures and dislocations and complications associated with managements                                                     |
| Session10:<br>Wrist and hands problems and management.                                                                                                                                      |

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|--------------------------------------------------------------------|--------------------------------------------------------------|
| <b>11.Course Evaluation</b>                                        |                                                              |
| Clinical oral exam                                                 |                                                              |
| <b>12. Learning and Teaching Resources</b>                         |                                                              |
| Required textbooks (curricular books, if any)                      | Apley's System of Orthopaedics and Fractures. Ninth Edition. |
| Main references (sources)                                          |                                                              |
| Recommended books and references (scientific journals, reports...) |                                                              |
| Electronic References, Websites                                    |                                                              |

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|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                |
| Clinical Ophthalmology                                                     |                                                                                                                                                                                                                                                                |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                |
|                                                                            |                                                                                                                                                                                                                                                                |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                |
| 2 <sup>nd</sup> semester / 5 <sup>th</sup> year                            |                                                                                                                                                                                                                                                                |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                |
| 5 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                |
| 45                                                                         |                                                                                                                                                                                                                                                                |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                |
| Name:                                                                      |                                                                                                                                                                                                                                                                |
|                                                                            |                                                                                                                                                                                                                                                                |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                |
| <b>Course Objectives</b>                                                   | The course describes the basic clinical knowledges of Ophthalmology to the medical students in order to build the clinical knowledge and clinical skills in diagnosis and treatment of the different diseases including ocular diseases and refractive errors. |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                |
| <b>Strategy</b>                                                            | <ul style="list-style-type: none"> <li>•Clinical sessions in the outpatient Eye clinic.</li> <li>•Case based learning to solve patient problem</li> <li>•Small group teaching</li> </ul>                                                                       |

## 10. Course Structure

| <b>Clinical training in Ophthalmology</b> |                                                                                                                                                                   |
|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Session 1                                 | Introduction to Eye clinic equipment and investigation devices used in ophthalmology                                                                              |
| Session 2                                 | General ophthalmic examination skills; taking ocular history. Visual acuity testing, slit-lamp examination, and fundoscopy.                                       |
| Session 3                                 | Refraction session I; Visual acuity assessment, color vision, retinoscopy.                                                                                        |
| Session 4                                 | Refraction session II; subjective refraction, glasses prescription.                                                                                               |
| Session 5                                 | Ophthalmic investigation and interpretation; learn to interpret corneal topography, OCT, biometry, perimetry.                                                     |
| Session 6                                 | Cornea and External Disease; learn about anterior segment examination, perform slit-lamp examination, corneal fluorescence staining, and assessment of tear film. |
| Session 7                                 | Cataract session; exam cataract under slit lamp, learn about type, maturity and morphology of cataract.                                                           |
| Session 8                                 | Glaucoma session; learn about tonometry and IOP measurement, Gonioscopy, perimetry and optic disc assessment                                                      |
| Session 9                                 | Retina session; learn and observe indirect ophthalmoscopy, learns about different retinal pathologies.                                                            |
| Session 10                                | Ocular motility session; observe and perform motility, detect various type of motility disorders and nerve palsies.                                               |
| Session 11                                | Squint session; learn and perform cover/uncover, alternating cover test, observe and examine different types of squint.                                           |
| Session 12                                | Oculoplastic session; observe and perform eyelid assessment and measurements, ptosis examination, lacrimal and orbital examination.                               |
| Session 13                                | Uveitis session; examining patients with symptoms of uveitis (e.g., eye redness, pain, floaters).                                                                 |
| Session 14                                | Emergency Ophthalmology session I; Assessing patients with foreign bodies, blunt trauma, penetrating, acute angle-closure glaucoma, or chemical burns.            |
| Session 15                                | Emergency Ophthalmology session II; Learn about basic and primary approach in managing ocular trauma in emergency room.                                           |

## 11. Course Evaluation

Clinical oral exam & OSCE

## 12. Learning and Teaching Resources

|                                               |                                                                                                                    |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any) | Kanski's Clinical Ophthalmology. A system approach, Tenth Edition.<br>Clinical Optics. By A.R. Elkington and Helen |
|-----------------------------------------------|--------------------------------------------------------------------------------------------------------------------|

|                                                                       |                       |
|-----------------------------------------------------------------------|-----------------------|
|                                                                       | Frank, Third Edition. |
| Main references (sources)                                             |                       |
| Recommended books and references<br>(scientific journals, reports...) |                       |
| Electronic References, Websites                                       |                       |

## 6<sup>th</sup> Years Course Description Form

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                            |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Clinical medicine                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                            |
|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 6 <sup>th</sup> year                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 11/5/2025                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 6 <sup>th</sup> stage students                                             |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 360                                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| Name:                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Course Objectives</b>                                                   | <p>By the end of the course, students should be able to:</p> <ol style="list-style-type: none"> <li>1. Perform comprehensive patient assessments, including history-taking, physical examination, and diagnostic interpretation.</li> <li>2. Develop differential diagnoses and formulate appropriate management plans.</li> <li>3. Demonstrate proficiency in clinical procedures relevant to their rotations.</li> </ol> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                                                            |
| <b>Strategy</b>                                                            | Clinical Rounds & sessions.                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                                                            |

| Week | Hours  | ILOs                        | Unit/Module or Topic Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Teaching Method                                                                                                                                                                                                                                                            | Assessment Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------|--------|-----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1    | 30 Hr. | Cardiovascular System (CVS) | <b>Key Topics:</b> <ul style="list-style-type: none"> <li>Hypertension (Essential &amp; Secondary)</li> <li>Coronary Artery Disease (Angina, Myocardial Infarction)</li> <li>Heart Failure (Acute &amp; Chronic)</li> <li>Arrhythmias (Atrial Fibrillation, Ventricular Tachycardia)</li> <li>Valvular Heart Diseases (Mitral, Aortic, Tricuspid, Pulmonary)</li> <li>Infective Endocarditis</li> <li>Pericardial Diseases (Pericarditis, Pericardial Effusion)</li> <li>Congenital Heart Diseases in Adults</li> <li>Peripheral Vascular Disease</li> <li>Deep Vein Thrombosis (DVT) &amp; Pulmonary Embolism (PE)</li> <li>Cardiomyopathies (Dilated, Hypertrophic, Restrictive)</li> </ul><br><b>Skills &amp; Procedures:</b> <ul style="list-style-type: none"> <li>ECG Interpretation</li> <li>Echocardiography Basics</li> </ul> | <b>📖 Clinical Clerkships:</b> Direct patient care under supervision<br><b>📖 Bedside Teaching:</b> Case discussions, patient rounds<br><b>📖 Lectures &amp; Seminars:</b> Updates on medical advancements<br><b>📖 Case-Based Learning (CBL):</b> Problem-solving discussions | <b>📖 Clinical Performance:</b> Supervisor assessments during rotations<br><b>📖 Written Exams:</b> MCQs, short-answer questions (SAQs)<br><b>📖 OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios<br><b>📖 Case Presentations:</b> Individual and group-based presentations<br><b>📖 Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections<br><b>📖 Final Comprehensive Exam:</b> Includes written, oral, and clinical components |

|   |        |                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---|--------|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|   |        |                                  | <ul style="list-style-type: none"> <li>• Blood Pressure Measurement &amp; Hypertension Management</li> <li>• Chest Pain Evaluation</li> <li>• ACLS (Advanced Cardiac Life Support)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                                                                                                                                                                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 2 | 30 Hr. | Respiratory System (Pulmonology) | <p><b>Key Topics:</b></p> <ul style="list-style-type: none"> <li>• Chronic Obstructive Pulmonary Disease (COPD)</li> <li>• Asthma &amp; Acute Exacerbation</li> <li>• Pneumonia (Community-Acquired, Hospital-Acquired)</li> <li>• Tuberculosis (Pulmonary &amp; Extrapulmonary)</li> <li>• Lung Cancer &amp; Screening Guidelines</li> <li>• Interstitial Lung Diseases</li> <li>• Pulmonary Hypertension</li> <li>• Pleural Diseases (Pleural Effusion, Pneumothorax)</li> <li>• Obstructive Sleep Apnea (OSA)</li> <li>• Pulmonary Embolism (PE)</li> </ul> <p><b>Skills &amp; Procedures:</b></p> <ul style="list-style-type: none"> <li>• Pulmonary Function Test (PFT) Interpretation</li> <li>• Arterial Blood Gas</li> </ul> | <p>📖 <b>Clinical Clerkships:</b> Direct patient care under supervision</p> <p>📖 <b>Bedside Teaching:</b> Case discussions, patient rounds</p> <p>📖 <b>Lectures &amp; Seminars:</b> Updates on medical advancements</p> <p>📖 <b>Case-Based Learning (CBL):</b> Problem-solving discussions</p> | <p>📖 <b>Clinical Performance:</b> Supervisor assessments during rotations</p> <p>📖 <b>Written Exams:</b> MCQs, short-answer questions (SAQs)</p> <p>📖 <b>OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios</p> <p>📖 <b>Case Presentations:</b> Individual and group-based presentations</p> <p>📖 <b>Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections</p> <p>📖 <b>Final Comprehensive Exam:</b> Includes written, oral, and clinical components</p> |

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|   |        |                                         | (ABG) Analysis <ul style="list-style-type: none"> <li>• Chest X-ray Interpretation</li> <li>• Oxygen Therapy &amp; Ventilation Support</li> <li>• Pleural Aspiration</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 3 | 30 Hr. | Gastrointestinal & Hepatobiliary System | <b>Key Topics:</b> <ul style="list-style-type: none"> <li>• Gastroesophageal Reflux Disease (GERD) &amp; Peptic Ulcer Disease</li> <li>• Hepatitis (Viral, Autoimmune, Alcoholic, Drug-Induced)</li> <li>• Liver Cirrhosis &amp; Its Complications (Portal Hypertension, Hepatic Encephalopathy)</li> <li>• Inflammatory Bowel Disease (Crohn's, Ulcerative Colitis)</li> <li>• Irritable Bowel Syndrome (IBS)</li> <li>• Acute &amp; Chronic Pancreatitis</li> <li>• Gastrointestinal Bleeding (Upper &amp; Lower)</li> <li>• Malabsorption Syndromes (Celiac, Tropical Sprue)</li> <li>• Gallbladder Diseases (Cholelithiasis, Cholecystitis)</li> <li>• Colorectal Cancer &amp; Screening</li> </ul> | <b>📋 Clinical Clerkships:</b> Direct patient care under supervision<br><b>📋 Bedside Teaching:</b> Case discussions, patient rounds<br><b>📋 Lectures &amp; Seminars:</b> Updates on medical advancements<br><b>📋 Case-Based Learning (CBL):</b> Problem-solving discussions | <b>📋 Clinical Performance:</b> Supervisor assessments during rotations<br><b>📋 Written Exams:</b> MCQs, short-answer questions (SAQs)<br><b>📋 OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios<br><b>📋 Case Presentations:</b> Individual and group-based presentations<br><b>📋 Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections<br><b>📋 Final Comprehensive Exam:</b> Includes written, oral, and clinical components |

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|  |  |  | <b>Skills &amp; Procedures:</b> <ul style="list-style-type: none"> <li>• Abdominal Examination</li> <li>• Endoscopy &amp; Colonoscopy Basics</li> <li>• Liver Function Test (LFT) Interpretation</li> <li>• Ascitic Tap Procedure</li> <li>• Managing GI Bleeding</li> </ul> |  |  |
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| 4 | 30 Hr. | Neurology                  | <b>Key Topics:</b> <ul style="list-style-type: none"> <li>Stroke (Ischemic &amp; Hemorrhagic)</li> <li>Epilepsy &amp; Seizure Disorders</li> <li>Parkinson's Disease &amp; Movement Disorders</li> <li>Multiple Sclerosis (MS)</li> <li>Headache Syndromes (Migraine, Tension-Type, Cluster Headache)</li> <li>Meningitis &amp; Encephalitis</li> <li>Neuropathy (Diabetic, Guillain-Barré Syndrome)</li> <li>Dementia &amp; Alzheimer's Disease</li> <li>Spinal Cord Disorders</li> </ul> <b>Skills &amp; Procedures:</b> <ul style="list-style-type: none"> <li>Neurological Examination</li> <li>CT &amp; MRI Brain Interpretation</li> <li>Lumbar Puncture Procedure</li> <li>NIH Stroke Scale Usage</li> </ul> | <b>📋 Clinical Clerkships:</b> Direct patient care under supervision<br><b>📋 Bedside Teaching:</b> Case discussions, patient rounds<br><b>📋 Lectures &amp; Seminars:</b> Updates on medical advancements<br><b>📋 Case-Based Learning (CBL):</b> Problem-solving discussions | <b>📋 Clinical Performance:</b> Supervisor assessments during rotations<br><b>📋 Written Exams:</b> MCQs, short-answer questions (SAQs)<br><b>📋 OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios<br><b>📋 Case Presentations:</b> Individual and group-based presentations<br><b>📋 Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections<br><b>📋 Final Comprehensive Exam:</b> Includes written, oral, and clinical components |
| 5 | 30 Hr. | Endocrinology & Metabolism | <b>Key Topics:</b> <ul style="list-style-type: none"> <li>Diabetes Mellitus (Type 1 &amp; Type 2) &amp; Complications</li> <li>Thyroid Disorders</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <b>📋 Clinical Clerkships:</b> Direct patient care under supervision<br><b>📋 Bedside</b>                                                                                                                                                                                    | <b>📋 Clinical Performance:</b> Supervisor assessments during rotations<br><b>📋 Written Exams:</b>                                                                                                                                                                                                                                                                                                                                                                                          |

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|   |        |                                   | <p>(Hyperthyroidism, Hypothyroidism, Thyroid Nodule Evaluation)</p> <ul style="list-style-type: none"> <li>• Adrenal Disorders (Addison's Disease, Cushing's Syndrome)</li> <li>• Pituitary Disorders (Acromegaly, Prolactinoma)</li> <li>• Calcium &amp; Bone Metabolism Disorders (Osteoporosis, Hyperparathyroidism)</li> </ul> <p><b>Skills &amp; Procedures:</b></p> <ul style="list-style-type: none"> <li>• Diabetic Foot Examination</li> <li>• Blood Glucose Monitoring &amp; Insulin Therapy</li> <li>• Thyroid Function Test (TFT) Interpretation</li> </ul> | <p><b>Teaching:</b> Case discussions, patient rounds</p> <p>📖 <b>Lectures &amp; Seminars:</b> Updates on medical advancements</p> <p>📖 <b>Case-Based Learning (CBL):</b> Problem-solving discussions</p>                                                                          | <p>MCQs, short-answer questions (SAQs)</p> <p>📖 <b>OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios</p> <p>📖 <b>Case Presentations:</b> Individual and group-based presentations</p> <p>📖 <b>Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections</p> <p>📖 <b>Final Comprehensive Exam:</b> Includes written, oral, and clinical components</p> |
| 6 | 30 Hr. | Nephrology & Genitourinary System | <p><b>Key Topics:</b></p> <ul style="list-style-type: none"> <li>• Acute Kidney Injury (AKI) &amp; Chronic Kidney Disease (CKD)</li> <li>• Glomerulonephritis</li> <li>• Electrolyte Imbalances (Hyponatremia, Hyperkalemia)</li> <li>• Urinary Tract Infections (UTI) &amp; Pyelonephritis</li> <li>• Nephrotic &amp; Nephritic</li> </ul>                                                                                                                                                                                                                             | <p>📖 <b>Clinical Clerkships:</b> Direct patient care under supervision</p> <p>📖 <b>Bedside Teaching:</b> Case discussions, patient rounds</p> <p>📖 <b>Lectures &amp; Seminars:</b> Updates on medical advancements</p> <p>📖 <b>Case-Based Learning (CBL):</b> Problem-solving</p> | <p>📖 <b>Clinical Performance:</b> Supervisor assessments during rotations</p> <p>📖 <b>Written Exams:</b> MCQs, short-answer questions (SAQs)</p> <p>📖 <b>OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios</p> <p>📖 <b>Case Presentations:</b> Individual and group-based presentations</p>                                                                             |

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|   |        |                       | <p>Syndromes</p> <ul style="list-style-type: none"> <li>Dialysis &amp; Renal Transplantation Basics</li> </ul> <p><b>Skills &amp; Procedures:</b></p> <ul style="list-style-type: none"> <li>Urinalysis Interpretation</li> <li>Fluid &amp; Electrolyte Management</li> <li>Foley Catheterization Procedure</li> </ul>                                                                                                                                                                            | discussions                                                                                                                                                                                                                                                                                               | <p>📖 <b>Logbook &amp; Portfolio:</b><br/>Documenting cases, procedures, and reflections</p> <p>📖 <b>Final Comprehensive Exam:</b> Includes written, oral, and clinical components</p>                                                                                                                                                                                                                                                                                                                                                     |
| 7 | 30 Hr. | Hematology & Oncology | <p><b>Key Topics:</b></p> <ul style="list-style-type: none"> <li>Anemias (Iron Deficiency, Hemolytic, Aplastic)</li> <li>Leukemias &amp; Lymphomas</li> <li>Coagulation Disorders (Hemophilia, DIC)</li> <li>Multiple Myeloma</li> <li>Blood Transfusion Reactions</li> </ul> <p><b>Skills &amp; Procedures:</b></p> <ul style="list-style-type: none"> <li>Bone Marrow Aspiration Basics</li> <li>Complete Blood Count (CBC) Interpretation</li> <li>Blood Typing &amp; Crossmatching</li> </ul> | <p>📖 <b>Clinical Clerkships:</b><br/>Direct patient care under supervision</p> <p>📖 <b>Bedside Teaching:</b> Case discussions, patient rounds</p> <p>📖 <b>Lectures &amp; Seminars:</b><br/>Updates on medical advancements</p> <p>📖 <b>Case-Based Learning (CBL):</b><br/>Problem-solving discussions</p> | <p>📖 <b>Clinical Performance:</b><br/>Supervisor assessments during rotations</p> <p>📖 <b>Written Exams:</b><br/>MCQs, short-answer questions (SAQs)</p> <p>📖 <b>OSCE (Objective Structured Clinical Examination):</b><br/>Practical skills and case scenarios</p> <p>📖 <b>Case Presentations:</b><br/>Individual and group-based presentations</p> <p>📖 <b>Logbook &amp; Portfolio:</b><br/>Documenting cases, procedures, and reflections</p> <p>📖 <b>Final Comprehensive Exam:</b> Includes written, oral, and clinical components</p> |
| 8 | 30 Hr. | Rheumatology & Autoim | <p><b>Key Topics:</b></p> <ul style="list-style-type: none"> <li>Rheumatoid Arthritis (RA)</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                             | <p>📖 <b>Clinical Clerkships:</b><br/>Direct patient care under</p>                                                                                                                                                                                                                                        | <p>📖 <b>Clinical Performance:</b><br/>Supervisor assessments during</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |

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|   |        | immune Disorders    | <ul style="list-style-type: none"> <li>• Systemic Lupus Erythematosus (SLE)</li> <li>• Gout &amp; Pseudogout</li> <li>• Vasculitis Syndromes</li> <li>• Scleroderma &amp; Sjögren's Syndrome</li> </ul> <p><b>Skills &amp; Procedures:</b></p> <ul style="list-style-type: none"> <li>• Joint Aspiration &amp; Synovial Fluid Analysis</li> <li>• Rheumatological Investigations (ANA, RF, Anti-CCP)</li> </ul>                                             | supervision<br><b>Bedside Teaching:</b> Case discussions, patient rounds<br><b>Lectures &amp; Seminars:</b> Updates on medical advancements<br><b>Case-Based Learning (CBL):</b> Problem-solving discussions                                                       | rotations<br><b>Written Exams:</b> MCQs, short-answer questions (SAQs)<br><b>OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios<br><b>Case Presentations:</b> Individual and group-based presentations<br><b>Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections<br><b>Final Comprehensive Exam:</b> Includes written, oral, and clinical components |
| 9 | 30 Hr. | Infectious Diseases | <p><b>Key Topics:</b></p> <ul style="list-style-type: none"> <li>• Sepsis &amp; Septic Shock</li> <li>• HIV/AIDS &amp; Opportunistic Infections</li> <li>• Malaria, Dengue &amp; Tropical Infections</li> <li>• Hospital-Acquired Infections</li> <li>• Antibiotic Stewardship</li> </ul> <p><b>Skills &amp; Procedures:</b></p> <ul style="list-style-type: none"> <li>• Blood Culture Collection</li> <li>• Antibiotic Selection in Infections</li> </ul> | <b>Clinical Clerkships:</b> Direct patient care under supervision<br><b>Bedside Teaching:</b> Case discussions, patient rounds<br><b>Lectures &amp; Seminars:</b> Updates on medical advancements<br><b>Case-Based Learning (CBL):</b> Problem-solving discussions | <b>Clinical Performance:</b> Supervisor assessments during rotations<br><b>Written Exams:</b> MCQs, short-answer questions (SAQs)<br><b>OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios<br><b>Case Presentations:</b> Individual and group-based presentations<br><b>Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections<br><b>Final</b>          |

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|    |        |                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                            | <b>Comprehensive Exam:</b> Includes written, oral, and clinical components                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 10 | 30 Hr. | Emergency Medicine & Toxicology | <b>Key Topics:</b> <ul style="list-style-type: none"> <li>• Shock (Hypovolemic, Cardiogenic, Septic, Neurogenic)</li> <li>• Poisoning &amp; Overdose Management (Paracetamol, Organophosphates)</li> <li>• Anaphylaxis &amp; Acute Allergic Reactions</li> <li>• Trauma &amp; Resuscitation</li> <li>• Heat Stroke &amp; Hypothermia</li> </ul> <b>Skills &amp; Procedures:</b> <ul style="list-style-type: none"> <li>• Advanced Life Support (ACLS/BLS)</li> <li>• Triage in Emergency Cases</li> </ul> | <b>📋 Clinical Clerkships:</b> Direct patient care under supervision<br><b>📋 Bedside Teaching:</b> Case discussions, patient rounds<br><b>📋 Lectures &amp; Seminars:</b> Updates on medical advancements<br><b>📋 Case-Based Learning (CBL):</b> Problem-solving discussions | <b>📋 Clinical Performance:</b> Supervisor assessments during rotations<br><b>📋 Written Exams:</b> MCQs, short-answer questions (SAQs)<br><b>📋 OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios<br><b>📋 Case Presentations:</b> Individual and group-based presentations<br><b>📋 Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections<br><b>📋 Final Comprehensive Exam:</b> Includes written, oral, and clinical components |

## 11.Course Evaluation

Objective Structured Clinical Examination (OSCEs) – Simulated patient encounters to assess clinical skills.

Direct Observation of Procedural Skills (DOPS) – Supervisors assess real-life procedural competency.

Case Presentations & Clinical Rotations – Real patient evaluations and management plans.

Logbooks & Portfolios – Documentation of clinical skills performed.  
Workplace-Based Assessments (WBA) – Evaluation by mentors in real clinical settings.

## 12. Learning and Teaching Resources

|                                                                       |                                                                                    |
|-----------------------------------------------------------------------|------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                         | Harrison's Principles of Internal Medicine<br>Oxford Handbook of Clinical Medicine |
| Main references (sources)                                             |                                                                                    |
| Recommended books and references<br>(scientific journals, reports...) |                                                                                    |
| Electronic References, Websites                                       |                                                                                    |

## 1. Course Name:

Clinical surgery

## 2. Course Code:

## 3. Semester / Year:

6<sup>th</sup> year

## 4. Description Preparation Date:

11/5/2025

## 5. Available Attendance Forms:

6<sup>th</sup> stage students

## 6. Number of Credit Hours (Total) / Number of Units (Total) :

420

## 7. Course administrator's name (mention all, if more than one name)

Name:

## 8. Course Objectives

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| <b>Course Objectives</b> | <p>By the end of the course, students should be able to:</p> <p>Perform comprehensive patient assessments, including history-taking, physical examination, and diagnostic interpretation.</p> <p>Develop differential diagnoses and formulate appropriate management plans.</p> <p>Demonstrate proficiency in clinical procedures relevant to their rotations.</p> <p>Work effectively within multidisciplinary healthcare teams.</p> |
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## 9. Teaching and Learning Strategies

|                 |                             |
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| <b>Strategy</b> | Clinical Rounds & sessions. |
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## 10. Course Structure

| Week                                                 | Unit/Module or Topic Title                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Teaching Method                                                                                                                                                                                                                                                                               | Assessment Method                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
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| 15 weeks total<br>6 hours daily<br>Total : 450 hours | <p><b>1. Core Surgical Topics</b></p> <p><i>General Surgery</i></p> <ul style="list-style-type: none"> <li>• <b>Wound Healing:</b> Phases, factors affecting healing, and complications.</li> <li>• <b>Surgical Infections:</b> Types (e.g., cellulitis, abscess, necrotizing fasciitis), management, and antibiotic use.</li> <li>• <b>Fluid and Electrolyte Management:</b> Preoperative and postoperative fluid balance.</li> <li>• <b>Shock:</b> Types (hypovolemic, septic, cardiogenic), diagnosis, and management.</li> <li>• <b>Bleeding and Hemostasis:</b> Coagulation cascade, blood transfusion, and management of bleeding disorders.</li> <li>• <b>Nutrition in Surgical Patients:</b> Enteral vs. parenteral nutrition, nutritional assessment.</li> <li>• <b>Trauma Surgery:</b> ATLS principles, primary and secondary surveys, and management of polytrauma.</li> </ul> <p><i>Common Surgical Conditions</i></p> <ul style="list-style-type: none"> <li>• <b>Acute Abdomen:</b> Appendicitis, perforated peptic ulcer, intestinal obstruction, acute pancreatitis.</li> <li>• <b>Hernias:</b> Inguinal, femoral, umbilical, and incisional hernias.</li> <li>• <b>Gallbladder and Biliary Tract Diseases:</b> Cholelithiasis, cholecystitis, cholangitis.</li> <li>• <b>Breast Diseases:</b> Benign breast conditions, breast cancer, and triple assessment.</li> </ul> | <p>📖 <b>Clinical Clerkships:</b> Direct patient care under supervision</p> <p>📖 <b>Bedside Teaching:</b> Case discussions, patient rounds</p> <p>📖 <b>Lectures &amp; Seminars:</b> Updates on medical advancements</p> <p>📖 <b>Case-Based Learning (CBL):</b> Problem-solving discussions</p> | <p>📖 <b>Clinical Performance:</b> Supervisor assessments during rotations</p> <p>📖 <b>Written Exams:</b> MCQs, short-answer questions (SAQs)</p> <p>📖 <b>OSCE (Objective Structured Clinical Examination):</b> Practical skills and case scenarios</p> <p>📖 <b>Case Presentations:</b> Individual and group-based presentations</p> <p>📖 <b>Logbook &amp; Portfolio:</b> Documenting cases, procedures, and reflections</p> <p>📖 <b>Final Comprehensive Exam:</b> Includes written, oral, and clinical components</p> |

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|  | <ul style="list-style-type: none"> <li>• <b>Thyroid and Parathyroid Diseases:</b> Goiter, hyperthyroidism, thyroid cancer.</li> <li>• <b>Colorectal Surgery:</b> Colorectal cancer, diverticulitis, inflammatory bowel disease (IBD).</li> <li>• <b>Vascular Surgery:</b> Peripheral arterial disease, deep vein thrombosis (DVT), varicose veins.</li> </ul> <p><i>Oncology</i></p> <ul style="list-style-type: none"> <li>• Principles of cancer surgery: Staging, biopsy techniques, and multidisciplinary management.</li> <li>• Common surgical cancers: Breast, colorectal, thyroid, and skin cancers.</li> </ul> <p><i>Pediatric Surgery</i></p> <ul style="list-style-type: none"> <li>• Common pediatric surgical conditions: Congenital hypertrophic pyloric stenosis, intussusception, inguinal hernia.</li> <li>• Neonatal emergencies: Tracheoesophageal fistula, congenital diaphragmatic hernia.</li> </ul> <p><i>Orthopedic Surgery</i></p> <ul style="list-style-type: none"> <li>• Fracture management: Principles of fracture healing, casting, and surgical fixation.</li> <li>• Common orthopedic conditions: Osteoarthritis, septic arthritis, compartment syndrome.</li> </ul> <p><i>Urology</i></p> <ul style="list-style-type: none"> <li>• Common urological conditions: Benign prostatic hyperplasia (BPH), urinary stones, testicular torsion.</li> <li>• Urinary tract infections (UTIs) and their surgical implications.</li> </ul> |  |  |
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|  | <p><i>Neurosurgery</i></p> <ul style="list-style-type: none"> <li>• Head injury: Assessment and management.</li> <li>• Increased intracranial pressure (ICP) and its surgical management.</li> </ul> <p><i>Cardiothoracic Surgery</i></p> <ul style="list-style-type: none"> <li>• Basics of cardiac surgery: Coronary artery bypass grafting (CABG), valve replacement.</li> <li>• Thoracic conditions: Pneumothorax, pleural effusion, lung cancer.</li> </ul> <hr/> <p><b>2. Clinical Skills Training</b></p> <p>These are the practical skills that 6th-grade medical students are expected to learn and practice during their clinical rotations.</p> <p><i>Basic Surgical Skills</i></p> <ul style="list-style-type: none"> <li>• <b>Aseptic Technique:</b> Handwashing, scrubbing, gowning, and gloving.</li> <li>• <b>Wound Management:</b> Suturing, knot tying, wound dressing, and drain removal.</li> <li>• <b>Incision and Drainage:</b> Abscess drainage and wound debridement.</li> <li>• <b>Catheterization:</b> Foley catheter insertion.</li> <li>• <b>Nasogastric Tube Insertion:</b> Indications and technique.</li> </ul> <p><i>Advanced Skills (Observed or Assisted)</i></p> <ul style="list-style-type: none"> <li>• <b>Assisting in Surgery:</b> Retracting, suctioning, and assisting with hemostasis.</li> <li>• <b>Laparoscopic Skills:</b> Basics of laparoscopic instruments and techniques.</li> </ul> |  |  |
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- **Biopsy Techniques:** Fine-needle aspiration (FNA), core biopsy, and excisional biopsy.

### 3. Clinical Rotations

During the 6th grade, students typically rotate through various surgical departments to gain hands-on experience. The rotations may include:

#### *General Surgery Ward*

- Preoperative assessment and preparation.
- Postoperative care: Monitoring vitals, managing drains, and recognizing complications.
- Ward rounds with the surgical team.

#### *Operating Theater*

- Observing and assisting in surgeries.
- Understanding the roles of the surgical team (surgeon, anesthetist, scrub nurse).
- Learning about sterilization and operating room protocols.

#### *Outpatient Clinics*

- Evaluating new patients with surgical complaints.
- Follow-up of postoperative patients.
- Learning to take focused surgical histories and perform physical examinations.

#### *Emergency Department*

- Managing acute surgical conditions (e.g., trauma, acute abdomen).
- Participating in trauma calls and emergency surgeries.

### 4. Case-Based Learning

|  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |  |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  | <p>Students are often required to present and discuss cases to reinforce their learning. Examples include:</p> <ul style="list-style-type: none"> <li>• <b>Case Presentations:</b> Presenting a patient's history, examination findings, diagnosis, and management plan.</li> <li>• <b>Journal Clubs:</b> Discussing recent surgical research papers or guidelines.</li> <li>• <b>Morbidity and Mortality (M&amp;M) Meetings:</b> Analyzing complications and learning from mistakes.</li> </ul> <hr/> <hr/> |  |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

## 11.Course Evaluation

Case-Based Discussions (CBDs) – Evaluates problem-solving and clinical reasoning.  
Objective Structured Clinical Examinations (OSCEs) – Assesses decision-making in real-life scenarios.  
Multiple Mini Interviews (MMIs) – Tests ethical reasoning and communication.  
Critical Appraisal of Research – Develops analytical thinking skills.  
Portfolio & Reflective Writing – Encourages self-assessment and improvement.

## 12. Learning and Teaching Resources

|                                                                    |                                                                                              |
|--------------------------------------------------------------------|----------------------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Baily and Love's Textbook / Short Practice Surgery<br>Brows Textbook of Clinical examination |
| Main references (sources)                                          |                                                                                              |
| Recommended books and references (scientific journals, reports...) |                                                                                              |
| Electronic References, Websites                                    |                                                                                              |

|                                                                            |                                                                                                                                                                                      |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                      |
| Clinical pediatrics                                                        |                                                                                                                                                                                      |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                      |
|                                                                            |                                                                                                                                                                                      |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                      |
| 6 <sup>th</sup> year                                                       |                                                                                                                                                                                      |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                      |
| 11/5/2025                                                                  |                                                                                                                                                                                      |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                      |
| 6 <sup>th</sup> stage students                                             |                                                                                                                                                                                      |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total) :</b>       |                                                                                                                                                                                      |
| 300                                                                        |                                                                                                                                                                                      |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                      |
| Name:                                                                      |                                                                                                                                                                                      |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                      |
| <b>Course Objectives</b>                                                   | Performing a thorough pediatric history and physical examination<br>Interpreting laboratory and imaging studies<br>Developing a differential diagnosis<br>Creating a management plan |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                      |
| <b>Strategy</b>                                                            | Clinical tour<br>Case based learning to solve patient problem<br>Small group teaching<br>Skill lab                                                                                   |
| <b>10. Course Structure</b>                                                |                                                                                                                                                                                      |

| Week | Hours | Unit/Module or Topic Title                                                                                                                                                                                                                                                                                                                                           | Teaching Method                  | Assessment Method                           |
|------|-------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|---------------------------------------------|
| 1st  | 6hrs. | <b>Growth and Development*</b><br>- *Objective:* Assess and monitor normal growth and development in children.<br>- Learn to plot and interpret growth charts (weight, height, head circumference).<br>- Identify developmental milestones and recognize delays.<br>- Understand the impact of nutrition, genetics, and environment on growth.                       | practical experiments and skills | Oral questions and discussion with students |
| 2nd  | 6hrs. | <b>Neonatology*</b><br>- *Objective:* Manage common neonatal conditions and provide newborn care.<br>- Learn about routine newborn care (e.g., breastfeeding, immunization, screening tests).<br>- Diagnose and manage neonatal jaundice, respiratory distress syndrome, and sepsis.<br>- Understand the principles of neonatal resuscitation (NRP).                 | //                               | //                                          |
| 3rd  | 6hrs. | <b>Nutrition and Nutritional Disorders*</b><br>- *Objective:* Promote optimal nutrition and manage nutritional disorders.<br>- Understand breastfeeding techniques and complementary feeding.<br>- Diagnose and manage malnutrition (e.g., undernutrition, obesity, micronutrient deficiencies).<br>- Learn about nutritional requirements for different age groups. | //                               | //                                          |
| 4th  | 6hrs. | <b>Infectious Diseases*</b><br>- *Objective:* Diagnose and manage common pediatric infections.<br>- Recognize and treat respiratory infections (e.g., pneumonia, bronchiolitis).<br>- Manage gastrointestinal infections (e.g., diarrhea, viral hepatitis).<br>- Understand the prevention and treatment of vaccine-preventable diseases (e.g., measles, pertussis). | //                               | //                                          |
| 5th  | 6hrs. | <b>Respiratory Disorders*</b><br>- *Objective:* Evaluate and manage                                                                                                                                                                                                                                                                                                  | //                               | //                                          |

|     |       |                                                                                                                                                                                                                                                                                                                              |    |    |
|-----|-------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----|----|
|     |       | respiratory conditions in children.<br>- Diagnose and treat asthma, cystic fibrosis, and recurrent wheezing.<br>- Learn about the management of chronic lung diseases (e.g., bronchopulmonary dysplasia).                                                                                                                    |    |    |
| 6th | 6hrs. | Gastrointestinal Disorders*<br>- *Objective:* Manage common gastrointestinal conditions in children.<br>- Diagnose and treat gastroesophageal reflux disease (GERD), celiac disease, and inflammatory bowel disease (IBD).<br>- Understand the approach to acute abdominal conditions (e.g., appendicitis, intussusception). | // | // |
| 7th | 6hrs. | . Cardiovascular Disorders*<br>- *Objective:* Recognize and manage pediatric heart conditions.<br>- Diagnose congenital heart diseases (e.g., VSD, ASD, TOF).<br>- Manage acquired heart diseases (e.g., rheumatic fever, Kawasaki disease).                                                                                 | // | // |
| 8th | 2hrs. | Neurology*<br>- *Objective:* Evaluate and manage neurologic conditions in children.<br>- Diagnose and treat epilepsy, cerebral palsy, and neurodevelopmental disorders.<br>- Learn about the management of acute neurologic emergencies (e.g., meningitis, status epilepticus).                                              | // | // |
| 9th | 2hrs. | Skill lab attendance<br>Exchange transfusion training<br>LP procedure<br>Vein cannulation                                                                                                                                                                                                                                    | // | // |

## 11.Course Evaluation

Osce exam

## 12. Learning and Teaching Resources

|                                               |                                                                       |
|-----------------------------------------------|-----------------------------------------------------------------------|
| Required textbooks (curricular books, if any) | Macleod's Clinical Examination: 15th edition<br>Hutchison Paediatrics |
| Main references (sources)                     |                                                                       |
| Recommended books and references              |                                                                       |

|                                   |  |
|-----------------------------------|--|
| (scientific journals, reports...) |  |
| Electronic References, Websites   |  |