

**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 Bologna 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:** The Department of Anesthesia Technology seeks to apply international standards in education, scientific research and community service for sustainable development in accordance with Islamic concepts

**Program Mission:** Anesthesia Department Techniques is aims to have a distinguished scientific standing by graduating qualified cadres to keep pace with developments in the field of anesthesia and intensive care techniques to enhance .professional concepts and ethics among students

### **Program Objectives:**

The department aims to graduate qualified technical personnel to carry out their work in the public and private health sectors and aims to obtain program accreditation and enter international and international classifications

**Curriculum Structure:** All courses / subjects included in the academic program according to the approved learning system (quarterly, annual) 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:** Al-Kafeel University.

**College/Institute:** College of Health and Medical Technologies.

**Scientific Department:** Department of cardiac care Technology

**Name of the academic or professional program:** Bachelor's degree

**Name of final degree:** Bachelor of cardiac care Technology

**Academic system:** semester

**Description preparation date:** 14/10/2025

**File filling date:** 22/10/2025

**Signature:** 

**Head of Department Name:**

**Asst. proff. Dr. Israa Abdul-Ameer**

**Date:** 22-10-2025

**Signature:** 

**Scientific Associate Name:**

**Asst. proff. Dr. Sddiq Ghani Joda**

**Date:** 22-10-2025

**The file is checked by:**

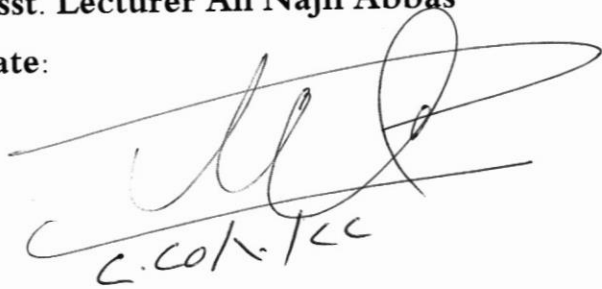
**Department of Quality Assurance and University Performance**

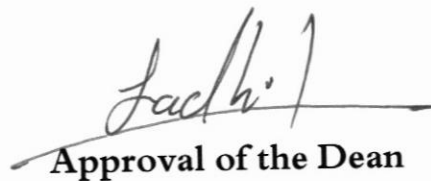
**Director of the Quality Assurance and University Performance Department:**

**Signature:**

**Asst. Lecturer Ali Najh Abbas**

**Date:**

  
C. Col. / CC

  
**Approval of the Dean**

### **1. Program Vision**

To make the Department of Cardiac Care Technology a distinguished model in preparing specialized graduates in this field, in accordance with medical sustainability systems and Islamic values to serve the community.

### **2. Program Mission**

The department aims to qualify students with sufficient scientific knowledge and practical skills in cardiac care technologies through the use of advanced training methods, while adhering to professional ethics and Islamic values to promote the health of individuals and the community.

### **3. Program Objectives**

1. Develop students' scientific and practical skills in the diagnosis and care of heart diseases.
2. Update curricula in line with the latest technologies and global standards.
3. Promote applied scientific research in the field of cardiac diseases and cardiac rehabilitation.
4. Establish partnerships with health and academic institutions to enhance practical training and field experience.
5. Strengthen Islamic values and professional ethics in the practice of technical work.

#### 4. Program Accreditation Ministry

Does the program have program accreditation? And from which agency? No

#### 5. Other external influences Chief of collage

Is there a sponsor for the program?

Ministry of Higher Education- Private Education Department

Higher Education Authority- Attabah Abbasia

#### 6. Program Structure

| Program Structure        | Number of Courses | Credit hours | Percentage | Reviews*          |
|--------------------------|-------------------|--------------|------------|-------------------|
| Institution Requirements | 1                 | 1            | 6%         | Guidance optional |
| College Requirements     | 1                 | 5            | 7%         |                   |
| Department Requirements  | ---               | ---          | --         |                   |
| Summer Training          | --                | --           | --         |                   |
| Other                    |                   |              |            |                   |

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

## 7. Program Description

| Year/Level | Course Code | Course Name                   | Credit Hours |           |
|------------|-------------|-------------------------------|--------------|-----------|
|            |             |                               | theoretical  | practical |
| Year one   |             | Anatomy I                     | 2            | 4         |
|            |             | Physiology I                  | 2            | 4         |
|            |             | Chemistry                     | 2            | 4         |
|            |             | Biology                       | 2            | 4         |
|            |             | computer principles           | 1            | 2         |
|            |             | Arabic language               | 2            | -         |
|            |             | Medical Terminology I         | 1            |           |
|            |             | <b>Human rights</b>           | 2            | 4         |
|            |             | Medical Physics               | 2            | 4         |
|            |             | Anatomy II                    | 2            | 4         |
|            |             | Physiology II                 | 2            | 4         |
|            |             | Biochemistry                  | 2            | 4         |
|            |             | Pathology and Hematology      | 2            | -         |
|            |             | <b>Medical Terminology II</b> | 1            | -         |

## 8. Expected Learning Outcomes of the Program

| Knowledge:                      |                                                                                                                                                                                                                                                                        |
|---------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Anatomy / Biology / Physiology: | To acquire a comprehensive understanding of the structure and function of the human body at the cellular, tissue, organ, and systemic levels.                                                                                                                          |
| Pathology and Hematology        | To understand pathological changes in cells and tissues and the mechanisms of disease development for clinical application, and to acquire knowledge of the formation and functions of blood cells and the diagnosis of blood diseases through basic laboratory tests. |
| Skills:                         |                                                                                                                                                                                                                                                                        |
| Chemistry / Physics             | To understand the chemical processes occurring inside and outside the human body, and to gain knowledge of human body physics by                                                                                                                                       |

|                                                |                                                                                                                              |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------|
|                                                | understanding the natural structure and function of the body, the major organ systems, and the physical laws governing them. |
| Computer Fundamentals:                         | o enable the student to efficiently use computers and basic software in academic and medical tasks.                          |
| <b>Values</b>                                  |                                                                                                                              |
| Medical Terminology and Professional Behavior: | To excel in mastering medical terminology for accurate documentation and discussion of patient cases.                        |
| Arabic Language:.                              | To master linguistic communication and academic writing skills for clear expression of medical ideas and concepts            |
| Human Rights:                                  | To uphold ethics, ensure patient confidentiality, obtain informed consent, and maintain professional integrity.              |

1. **Teaching and Learning Strategies** skills and values acquired by students after Theory lectures

2. Laboratory sessions

3. Display and presentation.

4. Interactive discussion

5. Brainstorming

6. Flipped classroom.

7. Seminar

8. Clinical visit

9. Small group teaching =

Teaching and learning strategies and methods adopted in the implementation of the program in general.

#### **10. Evaluation methods Day Examin Coues Examin, Final examin**

Implemented at all stages of the program in general.

1. Homework and individual and group reports

2. Daily quizzes

3. Practical skills assessment

4. Midterm and end of term exams

5. Graduation projects

## 11. Faculty

### Faculty Members

| Academic Rank<br><br>Professor              | Specialization<br><br>Pathology |                    | Special Requirements/<br>Skills (if applicable)<br><br>HISTOPSTHOL<br>OGY |  | Number of the<br>teaching staff<br><br>ONE THERORY<br><br>ONE PRACTIC |                  |
|---------------------------------------------|---------------------------------|--------------------|---------------------------------------------------------------------------|--|-----------------------------------------------------------------------|------------------|
|                                             | General                         | Special            |                                                                           |  | Staff                                                                 | Lec<br>tur<br>er |
| Prof. Dr. Ali Khalaf Hassan                 | Ph.D.                           | Physics            |                                                                           |  | ✓                                                                     |                  |
| Asst. Dr. Israa Hamza Jassim                | Ph.D.                           | Biology            |                                                                           |  | ✓                                                                     |                  |
| Assoc. Prof. Dr. Israa Abdul Ameer<br>Flaih | Ph.D.                           | Biology            |                                                                           |  | ✓                                                                     |                  |
| Mohammed Sarem Hamza                        | M.Sc.                           | Biology            |                                                                           |  |                                                                       |                  |
| Muntaha Abdullah Reshaan                    | Ph.D.                           | Nursing            |                                                                           |  | ✓                                                                     |                  |
| Ali Akbar Khalid                            | M.Sc.                           | Law                |                                                                           |  | ✓                                                                     |                  |
| Mohammed Murtadha Jabbar                    | M.Sc.                           | Nursing            |                                                                           |  | ✓                                                                     |                  |
| Mohammed Atheer Naji                        | M.Sc.                           | Physics            |                                                                           |  | ✓                                                                     |                  |
| Asst.<br>Lecturer Mohammed Sarem Hamza      | M.Sc.                           | Biology            |                                                                           |  | ✓                                                                     |                  |
| Ruqaya Alaa Meiri Mohammed                  | M.Sc.                           | Arabic<br>Language |                                                                           |  | ✓                                                                     |                  |
| Lecturer Abdul Hussein Jaafar Mousa         | M.Sc.                           | Chemistry          |                                                                           |  | ✓                                                                     |                  |

|                                          |       |                             |  |  |   |  |
|------------------------------------------|-------|-----------------------------|--|--|---|--|
| Asst. Lecturer Hussein Ali Hussein Taher | M.Sc. | Computer Science            |  |  | ✓ |  |
| Mohammed Mohsen Abdul-Hussein            | Ph.D. | Biology                     |  |  | ✓ |  |
| Kadhim Hamza Jabir                       | M.Sc. | Medical Laboratory Analysis |  |  | ✓ |  |

## Professional Development

**Mentoring new faculty members**– write lactuer and visin lacter .

Briefly describes the process used to mentor new, visiting, full-time, and part-time faculty at the institution and department level.

Professional Development

Mentoring new faculty members

Subjecting new teachers to courses on teaching methods and taking a teaching competency test, and only by passing it are they allowed to teach, while following up on their teaching methods and giving them feedback.

## Professional development of faculty members

Briefly describe the academic and professional development plan and arrangements for faculty such as teaching and learning strategies, assessment of learning outcomes, professional development, etc.

Follow up on teaching methods for all teachers by the Office of the Associate Dean, prepare seminars and workshops to develop teaching and speaking skills, and ensure the preparation and presentation of lectures in the continuing medical education curriculum.

#### **12. Acceptance Criterion =rat of average marke**

(Setting regulations related to enrollment in the college or institute, whether central admission or others)

The academic average for the student's graduation from preparatory school, physical and mental health according to the standards established and approved by the Ministry of Higher Education and Scientific Research

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

State briefly the sources of information about the program. =book and journal

1. Approved and authenticated documents for the general curriculum of the college and the courses, vision, mission, and goals of the university and college in both Arabic and English.

2. The website of the Ministry of Higher Education and Scientific Research.

3. The official website of Al-Kafeel University and its College of Health and Medical Technologies, Department of Anesthesia Technologies

4. Billboards installed in the college corridors.

#### **14. Program Development Plan**

By practice and theory lecture

1) Systematic and recurring self-evaluation studies of the program are based on evaluating the learning and teaching outcomes of students and obtaining feedback from students about the components of the program.

2) Holding regular meetings with faculty members in local and foreign health and medical technology colleges to learn about new curricula and teaching methods.

3) Holding workshops on developing curricula and teaching methods in the college or attending those held in neighboring universities.

| Program Skills Outline  |             |                       |                   |                                    |    |    |    |        |    |    |    |        |    |    |    |
|-------------------------|-------------|-----------------------|-------------------|------------------------------------|----|----|----|--------|----|----|----|--------|----|----|----|
|                         |             |                       |                   | Required program Learning outcomes |    |    |    |        |    |    |    |        |    |    |    |
| Year/Level              | Course Code | Course Name           | Basic or optional | Knowledge                          |    |    |    | Skills |    |    |    | Ethics |    |    |    |
|                         |             |                       |                   | A1                                 | A2 | A3 | A4 | B1     | B2 | B3 | B4 | C1     | C2 | C3 | C4 |
| Year One/first semester | BIO001      | Biology               | Basic             | /                                  | /  | /  |    | /      | /  | /  |    | /      | /  | /  |    |
|                         | AN001       | Anatomy I             | Basic             | /                                  | /  | /  |    | /      | /  | /  |    | /      | /  | /  |    |
|                         | CH001       | Chemistry             | Basic             | /                                  | /  | /  |    | /      | /  | /  |    | /      | /  | /  |    |
|                         | PHY001      | Physiology I          | Basic             | /                                  | /  | /  |    | /      | /  | /  |    | /      | /  | /  |    |
|                         | PC001       | Computer principle    | Optional          |                                    |    | /  |    |        |    | /  |    |        |    |    | /  |
|                         | ENG001      | Medical Terminology I | Optional          |                                    |    |    | /  |        |    |    | /  |        |    |    | /  |
|                         | AR001       | Arabic Language       | Optional          |                                    |    |    | /  |        |    |    | /  |        |    |    | /  |

| Program Skills Outline   |             |                          |                   |                                    |    |    |    |        |    |    |    |        |    |    |    |
|--------------------------|-------------|--------------------------|-------------------|------------------------------------|----|----|----|--------|----|----|----|--------|----|----|----|
|                          |             |                          |                   | Required program Learning outcomes |    |    |    |        |    |    |    |        |    |    |    |
| Year/Level               | Course Code | Course Name              | Basic or optional | Knowledge                          |    |    |    | Skills |    |    |    | Ethics |    |    |    |
|                          |             |                          |                   | A1                                 | A2 | A3 | A4 | B1     | B2 | B3 | B4 | C1     | C2 | C3 | C4 |
| Year One/second semester | AN001       | Anatomy II               | Basic             | /                                  | /  | /  |    | /      | /  | /  |    | /      | /  | /  |    |
|                          | CH001       | Biochemistry             | Basic             | /                                  | /  | /  |    | /      | /  | /  |    | /      | /  | /  |    |
|                          | PHC001      | Medical Physic           | Basic             |                                    | /  |    |    |        | /  |    |    |        |    | /  |    |
|                          | PHY001      | Physiology II            | Basic             | /                                  | /  | /  |    | /      | /  | /  |    | /      | /  | /  |    |
|                          | PHY001      | Pathology and Hematology | Optional          |                                    |    |    |    |        |    |    |    |        |    |    |    |
|                          | ENG001      | Medical Terminology II   | Optional          |                                    |    |    | /  |        |    |    | /  |        |    |    | /  |
|                          |             | Human rights             | Optional          |                                    |    |    |    |        |    |    |    |        |    |    |    |

Please tick the boxes corresponding to the individual program learning outcomes under evaluation.

## **First Stage /First Course**

## Course Description Form

|                                                                            |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
|----------------------------------------------------------------------------|--------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------|
| <b>1. Course Name:</b>                                                     |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| chemistry                                                                  |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>2. Course Code:</b>                                                     |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
|                                                                            |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>3. Semester / Year:year</b>                                             |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| First /2025                                                                |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>4. Description Preparation Date:</b>                                    |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| 2025                                                                       |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>5. Available Attendance Forms: 22/10/2025</b>                           |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
|                                                                            |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>6. Number of Credit Hours (Total) /</b>                                 |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| 30 hr /4 unite                                                             |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| Name: Abdulhussein jaafer shamsah                                          |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| Email: abdulhussien.shamsa@alkafeel.edu.iq                                 |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>8. Course Objectives</b>                                                |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>Course Objectives</b>                                                   |              | <ul style="list-style-type: none"> <li>Be able to understand the basic principles of general and life chemistry and its applications</li> <li>Be able to link the traumatic pain to abnormal changes in other components of the blood and body</li> <li>Have the ability to collect and treat biological samples</li> </ul> |                                                                                                                                                                  |                        |                          |
| <b>9. Teaching and Learning Strategies</b>                                 |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>Strategy</b>                                                            |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>10. Course Structure</b>                                                |              |                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                  |                        |                          |
| <b>Week</b>                                                                | <b>Hours</b> | <b>Required Learning Outcomes</b>                                                                                                                                                                                                                                                                                           | <b>Unit or subject name</b>                                                                                                                                      | <b>Learning method</b> | <b>Evaluation method</b> |
| 30                                                                         | 80           |                                                                                                                                                                                                                                                                                                                             | - Scope of biochemistry in health and disease, cell and cell constituents. Some aspects of physical chemistry, Gas laws, Boyle's law, Graham's Law of diffusion, |                        |                          |

|  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |  |  |
|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  |  |  | <p>Dalton's Law of partial pressure, General gas equation, the international system of units.</p> <p>Radio activity and radioactive isotopes</p> <p>Solutions and methods of expressing concentrations</p> <p>colloidal solution.</p> <p>The PH concept, Acid-base balance, chemical equilibrium, common ion effect.</p> <p>Buffer and buffer systems of physiological importance in living systems.</p> <p>Blood, blood constituents, body fluids, regulation of blood Ph and body fluids.</p> <p>Water and electrolyte balance – osmotic pressure of body fluids, control of total electrolytes and body fluids.</p> <p>Carbohydrates classification reactions, main carbohydrates in human body</p> <p>Metabolism of carbohydrates, blood glucose factors controlling glucose level in blood</p> <p>Glucose abnormalities, diabetes mellitus, ketosis, glycosuria, glucose tolerance curve</p> <p>Lipids, classification, derived lipids, compound, lipids</p> <p>Lipid metabolism, lipid abnormalities</p> <p>Proteins, classification, functions, peptide bonds, amino acids, chemical reactions.</p> <p>leic acids and their ressession, DNA Replication, Nutation, RNA Topology</p> |  |  |
|--|--|--|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

11. Course Evaluation=10 for day examin, 25 first course, 25 second course, 40 final examin.

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

## 12. Learning and Teaching Resources

|                                                                       |                                                                                  |
|-----------------------------------------------------------------------|----------------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                         | <b>General Chemistry: Principles, Patterns, and Applications</b><br>Context4Book |
| Main references (sources)                                             | General Organic chemistry NE<br>Chemistry                                        |
| Recommended books and references<br>(scientific journals, reports...) |                                                                                  |
| Electronic References, Websites                                       |                                                                                  |

|                                                                            |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
|----------------------------------------------------------------------------|--------------|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|--------------------------|
| <b>1. Course Name:</b>                                                     |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| General biology                                                            |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>2. Course Code:</b>                                                     |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
|                                                                            |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>3. Semester / Year:</b>                                                 |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| First /2025                                                                |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>4. Description Preparation</b>                                          |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| 2025                                                                       |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>5. Available Attendance Forms:</b>                                      |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
|                                                                            |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>6. Number of Credit Hours (Total) /</b>                                 |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| 30hr /4 Units (Total) 6                                                    |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| Dr. Mohammed Mohsen Abdul-Hussein                                          |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>8. Course Objectives</b>                                                |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>Course Objectives</b>                                                   |              |                                   | <ul style="list-style-type: none"> <li>Be able to understand the basic principles general and life biology and its applications</li> <li>Be able to link the traumatic pain to abnormal changes in other components of the cells &amp; body</li> <li>Have the ability to collect and treat biological samples</li> </ul> |                        |                          |
| <b>9. Teaching and Learning Strategies</b>                                 |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>Strategy</b>                                                            |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>10. Course Structure</b>                                                |              |                                   |                                                                                                                                                                                                                                                                                                                          |                        |                          |
| <b>Week</b>                                                                | <b>Hours</b> | <b>Required Learning Outcomes</b> | <b>Unit or subject name</b>                                                                                                                                                                                                                                                                                              | <b>Learning method</b> | <b>Evaluation method</b> |
| 15                                                                         |              |                                   | - Introduction to biology, the cells,                                                                                                                                                                                                                                                                                    |                        |                          |

|  |  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |  |  |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
|  |  |  | <p>prokaryotic and eukaryotic cells, animal and plant cell</p> <p>The Structure of cells , types , shape and</p> <p>Movement in and out of cells: diffusion , osmosis , active transport.</p> <p>Cell division: Amitosis, Mitosis and Meiosis</p> <p>Nucleic acid: DNA and RNA, DNA Replication</p> <p>Protein biosynthesis</p> <p>Human body tissues: Epithelial tissues</p> <p>Muscular and Nervous tissues</p> <p>Connective tissues: Bone and cartilage</p> <p>Blood ( R.B.C and WBC)</p> |  |  |
|--|--|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|

11. Course Evaluation=10 for day exam, 25 first course, 25 second course, 40 final exam.

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

## 12. Learning and Teaching Resources

|                                                                    |                                                      |
|--------------------------------------------------------------------|------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | <p>-human biology</p> <p>-Essential cell biology</p> |
| Main references (sources)                                          | -The core                                            |
| Recommended books and references (scientific journals, reports...) |                                                      |
| Electronic References, Websites                                    |                                                      |

## Course Description Form

|                                                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
|----------------------------------------------------------------------|-------|----------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|
| 13. Course Name:                                                     |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| <b>General Physiology</b>                                            |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 14. Course Code:                                                     |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
|                                                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 15. Semester / Year:                                                 |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| <b>Courses / first course / first stage</b>                          |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 16. Description Preparation Date:                                    |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 2025                                                                 |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 17. Available Attendance Forms:                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
|                                                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 18. Number of Credit Hours (Total) / Number of Units (Total)         |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 30hr/4unite                                                          |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 19. Course administrator's name (mention all, if more than one name) |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| A.L. . Kazim Hamza Jubair                                            |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 20. Course Objectives                                                |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| Course Objectives                                                    |       |                            | <ul style="list-style-type: none"> <li>Identify the principles of physiology and relationship to other sciences.</li> <li>Distinguishing between the normal physiolog state of the body and a pathological condition.</li> <li>To be able to use laboratory devices and tools.</li> <li>Conducting blood tests and other body fluids....</li> </ul> |                 |                   |
| 21. Teaching and Learning Strategies                                 |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| Strategy                                                             |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| 22. Course Structure                                                 |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |
| Week                                                                 | Hours | Required Learning Outcomes | Unit or subject name                                                                                                                                                                                                                                                                                                                                | Learning method | Evaluation method |
|                                                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                     |                 |                   |

|         |                                                                                                            |  |  |  |
|---------|------------------------------------------------------------------------------------------------------------|--|--|--|
| first   | Physiology of digestive system,<br>organs of digestion, functions                                          |  |  |  |
|         | Accessory organs of digestion and<br>function                                                              |  |  |  |
| second  | Steps of digestion (carbohydrate,<br>protein, fat digestion and<br>absorption)                             |  |  |  |
|         | Urinary system, renal functions,<br>urine formation.                                                       |  |  |  |
| third   | Organs of the urinary system and<br>their function                                                         |  |  |  |
| fourth  | Role of kidney to maintain body<br>fluids to regulate B.Pr., acid base<br>balance                          |  |  |  |
| fifth   | Body temperature regulation and<br>control                                                                 |  |  |  |
|         | Nervous system, CNS brain<br>function and centers                                                          |  |  |  |
| sixth   | Spinal cord, CSF, Spinal reflexes                                                                          |  |  |  |
|         | PNS Autonomic and Sensory                                                                                  |  |  |  |
| Seventh | Endocrine system control of<br>hormone, types and secretion<br>Hormonal secretion form different<br>glands |  |  |  |
| Eighth  | Reproductive system, male and<br>female reproductive system                                                |  |  |  |
|         | Skeletal system physiology.                                                                                |  |  |  |

|       |  |                                                              |  |  |  |
|-------|--|--------------------------------------------------------------|--|--|--|
| ninth |  | Special sense physiology (vision, hearing, smell and taste). |  |  |  |
| tenth |  |                                                              |  |  |  |

### 23. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

### 24. Learning and Teaching Resources

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

## Course Description Form

|                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. Course Name:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Computer Fundamentals (1)</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2. Course Code:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 3. Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>The first stage/first semester</b>                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 4. Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 2025                                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 5. Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| Is mandatory                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 6. Number of Credit Hours (Total) / Number of Units (Total)         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 30HR/2 Unite                                                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 7. Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| A.L hussein ali Hussein                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 8. Course Objectives                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| <b>Course Objectives</b>                                            | <ul style="list-style-type: none"> <li>• <b>Special goal:</b></li> <li>• <b>Providing the student with the skills of dealing with basic off applications, creating office files and documents, and using the operating system, as well as the basics of working within the digital environment.</b></li> <li>• <b>Overall goal:</b></li> <li>• <b>At the end of the academic year, the student should be able to Provide the student with knowledge in managing and using various computer applications.</b></li> <li>• <input type="checkbox"/> <b>Urging the student to be creative and think about specialization projects and keep pace with developments in this field.</b></li> <li>• <input type="checkbox"/> <b>Providing students with scientific, practical and personal skills that enable them to solve practical problems and deal with them using scientific concepts.</b></li> </ul> |
| 9. Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

| Strategy | Name of the unit/topic                                                                                                                                                                             | Required learning outcomes | hours                     | week |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|---------------------------|------|
|          | Computer Fundamentals, computer concept, phases of the computer life cycle, development of computer generations                                                                                    | Bachelor's                 | theoretical + 2 practical | 1    |
|          | Computer advantages and areas of use. Computer classification in terms of purpose, size and type of data                                                                                           |                            |                           | 2    |
|          | Computer Components Computer Components The physical parts of a computer and the software entities                                                                                                 |                            |                           | 3    |
|          | Your personal computer, the concept of computer security and software licenses                                                                                                                     |                            |                           | 4    |
|          | Computer Safety & Software License                                                                                                                                                                 |                            |                           | 5    |
|          | Ethics of the electronic world, forms of abuse, computer security, computer privacy.                                                                                                               |                            |                           | 6    |
|          | Computer software licenses and their types, intellectual property, electronic hacking, malware, the most important steps necessary to protect against hacking operations, computer harm to health. |                            |                           | 7    |
|          | Definition of Operating Systems Operating system, functions, goals, classification, examples of some operating systems                                                                             |                            |                           | 8    |
|          | Operating System Windows 7 Operating System                                                                                                                                                        |                            |                           | 9    |
|          | Desktop components Start menu, taskbar                                                                                                                                                             |                            |                           | 10   |
|          | Folders and files icons                                                                                                                                                                            |                            |                           | 11   |
|          | Performing operations on windows desktop backgrounds                                                                                                                                               |                            |                           | 12   |
|          | Control Panel Windows Control Panel "Control Category" Groups "Panel".                                                                                                                             |                            |                           | 13   |

|  |                                                                                                                                      |  |  |    |  |
|--|--------------------------------------------------------------------------------------------------------------------------------------|--|--|----|--|
|  | From the Defragment control panel, you can organize files inside the computer, install programs, and delete them                     |  |  | ١٤ |  |
|  | Some common conditions and settings in the computer, managing the printer, setting the time and date, maintaining the initial disks. |  |  | ١٥ |  |

#### 10. Course Structure

##### Course evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports, etc.

#### 11. Learning and Teaching Resources

|                                                                    |                                                                                                                                                                                         |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Required textbooks (curricular books if any)                       | <ul style="list-style-type: none"> <li>Computer basics and office applications / Part O</li> <li>- Mr. Dr. Ghassan Hamid Abdel Majeed and Dr. Z. Muhammad Abboud and others.</li> </ul> |
| Main references (sources)                                          | <ul style="list-style-type: none"> <li>Lectures provided by the subject teacher</li> <li>Books available in the college library</li> </ul>                                              |
| Recommended books and references (scientific journals, reports...) | <ul style="list-style-type: none"> <li>All reputable scientific journals related to computer science</li> <li>And solid scientific research published on social networks</li> </ul>     |
| Electronic References, Websites                                    | <ul style="list-style-type: none"> <li>Internet network</li> </ul>                                                                                                                      |

## Course Description Form

|                                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |
|----------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Course Name:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                        |
| Anatomy                                                                    |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>2. Course Code:</b>                                                     |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>3. Semester / Year:</b>                                                 |                                                                                                                                                                                                                                                                                                                                                                                        |
| Courses / first course / first stage                                       |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>4. Description Preparation Date:</b>                                    |                                                                                                                                                                                                                                                                                                                                                                                        |
| 2025                                                                       |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>5. Available Attendance Forms:</b>                                      |                                                                                                                                                                                                                                                                                                                                                                                        |
| Theory and practical lectures                                              |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>         |                                                                                                                                                                                                                                                                                                                                                                                        |
| 30hr/4unite                                                                |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |                                                                                                                                                                                                                                                                                                                                                                                        |
| Dr. Muntahaa abdullah                                                      |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>8. Course Objectives</b>                                                |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Course Objectives</b>                                                   | <ul style="list-style-type: none"> <li>Identify the principles of anatomy and their relationship to other sciences.</li> <li>Identify the body's systems and organ structure.</li> <li>Identify the precise structure of the organ.</li> <li>Focus on the primary information pertaining to each organ, which is represented by its composition, location and function.....</li> </ul> |
| <b>9. Teaching and Learning Strategies</b>                                 |                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>Strategy</b>                                                            |                                                                                                                                                                                                                                                                                                                                                                                        |

## 10. Course Structure

| Week | Hours | Required Learning Outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Unit or subject name | Learning method | Evaluation method |
|------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|-------------------|
|      |       | CNS structure and functions<br>PNS spinal nerves Sensory and motor nerves systems<br>GIT system ; parts and structure of wall and stomach<br>Salivary gland structure pancreases and Gall Bladder<br>Liver anatomy structure and functions<br>Urinary system kidney , ureter urinary bladder , urethra<br>Muscular system<br>Reproductive system - male genitalia . Female reproductive organs<br>Endocrine glands- anatomy and function<br>Endocrine glands- anatomy and function . Special sense anatomy<br>Skeletal system anatomy . The development and inheritance |                      |                 |                   |

## 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

## 12. Learning and Teaching Resources

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

## Course Description Form

|                                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
|----------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------|-------------------------|--------------------------|
| <b>1. Course Name:</b>                                                     |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| Arabic language                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>2. Course Code:</b>                                                     |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
|                                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>3. Semester / Year:</b>                                                 |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| First course                                                               |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>4. Description Preparation Date:</b>                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| 2025                                                                       |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>5. Available Attendance Forms:</b>                                      |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| Classes                                                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>         |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| 30 Hours/2                                                                 |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| Name: Ruqayyah Alaa Miri                                                   |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>8. Course Objectives</b>                                                |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>Course Objectives</b>                                                   |              | Introducing the student and making him aware of the most important human rights and what should be done in order to ensure life in freedom and dignity                                                                                                                                                                                                                                         |                                                              |                         |                          |
| <b>9. Teaching and Learning Strategies</b>                                 |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>Strategy</b>                                                            |              | 1- Adopting the method of delivering lectures and linking each topic with examples from a real work situation.<br>2- Giving them some simple practical exercises that are discussed by the students and solved during the lecture, with the participation of all students in the section with the professor, to give the subject a kind of interaction.<br>3- Presenting some practical cases. |                                                              |                         |                          |
| <b>10. Course Structure</b>                                                |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                              |                         |                          |
| <b>Week</b>                                                                | <b>Hours</b> | <b>Required Learning Outcomes</b>                                                                                                                                                                                                                                                                                                                                                              | <b>Unit or subject name</b>                                  | <b>Learning method</b>  | <b>Evaluation method</b> |
| 1                                                                          | 1            | <b>Bachelor's</b>                                                                                                                                                                                                                                                                                                                                                                              | Introduction to linguistic errors (ta' and ha')              | Theoretical + practical | Exams                    |
| 2                                                                          | 1            |                                                                                                                                                                                                                                                                                                                                                                                                | Introduction to linguistic errors (ta' and ha') <sup>٢</sup> |                         |                          |

|    |   |  |                                                                      |  |  |
|----|---|--|----------------------------------------------------------------------|--|--|
| 3  | 1 |  | Rules for writing extended and short alifs - solar and lunar letters |  |  |
| 4  | 1 |  | Writing the hamza                                                    |  |  |
| 5  | 1 |  | punctuation marks                                                    |  |  |
| 6  | 1 |  | The noun, the verb, and the difference between them                  |  |  |
| 7  | 1 |  | Objects                                                              |  |  |
| 8  | 1 |  | the number                                                           |  |  |
| 9  | 1 |  | Applications on common linguistic errors                             |  |  |
| 10 | 1 |  | Noun and noun - meanings of prepositions                             |  |  |
| 11 | 1 |  | Formal aspects of administrative discourse                           |  |  |
| 12 | 1 |  | The language of administrative discourse                             |  |  |
| 13 | 1 |  | Examples of administrative correspondence                            |  |  |
| 14 | 1 |  | Examples of administrative correspondence <sup>2</sup>               |  |  |
| 15 | 1 |  | Dhaad and Dhaa                                                       |  |  |

### 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

### 12. Learning and Teaching Resources

|                                                                    |                                                |
|--------------------------------------------------------------------|------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Collector of Arabic Lessons: Mustafa Al-Ghalay |
| Main references (sources)                                          |                                                |
| Recommended books and references (scientific journals, reports...) | Books and references on Arabic language        |
| Electronic References, Websites                                    | Internet network                               |

## Course Description Form

|                                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
|----------------------------------------------------------------------------|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------|--------------------------|
| <b>1. Course Name:</b>                                                     |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| Medical terms I                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>2. Course Code:</b>                                                     |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
|                                                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>3. Semester / Year:</b>                                                 |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| 1st Semester                                                               |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>4. Description Preparation Date:</b>                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| 2025                                                                       |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>5. Available Attendance Forms:</b>                                      |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| Classes                                                                    |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>6. Number of Credit Hours (Total) / Number of Units (Total)</b>         |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| 15 Hours/1 unite                                                           |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>7. Course administrator's name (mention all, if more than one name)</b> |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| Name: A.L Mohammed Sareem Hamza                                            |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>8. Course Objectives</b>                                                |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>Course Objectives</b>                                                   |              |                                                                                                                                                                                                                                                                                                                                                                                                | The objectives of the study subject are for the student to be able to distinguish roots and suffixes And prefixes and word endings for medical terms |                         |                          |
| <b>9. Teaching and Learning Strategies</b>                                 |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>Strategy</b>                                                            |              | 1- Adopting the method of delivering lectures and linking each topic with examples from a real work situation.<br>2- Giving them some simple practical exercises that are discussed by the students and solved during the lecture, with the participation of all students in the section with the professor, to give the subject a kind of interaction.<br>3- Presenting some practical cases. |                                                                                                                                                      |                         |                          |
| <b>10. Course Structure</b>                                                |              |                                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                      |                         |                          |
| <b>Week</b>                                                                | <b>Hours</b> | <b>Required Learning Outcomes</b>                                                                                                                                                                                                                                                                                                                                                              | <b>Unit or subject name</b>                                                                                                                          | <b>Learning method</b>  | <b>Evaluation method</b> |
| 1                                                                          |              | <b>Bachelor's</b>                                                                                                                                                                                                                                                                                                                                                                              | Introduction-structural analysis<br>Basic rules of medical word                                                                                      | Theoretical + practical | Exams                    |

|    |  |  |                                                        |  |  |
|----|--|--|--------------------------------------------------------|--|--|
|    |  |  | Building                                               |  |  |
| 2  |  |  | Major suffixes- suffixes denoting a state or condition |  |  |
| 3  |  |  | Major suffixes-suffixes denoting medical actions       |  |  |
| 4  |  |  | Prefixes- prefixes of No.& measures                    |  |  |
| 5  |  |  | Prefixes- prefixes of type Roots                       |  |  |
| 6  |  |  | Word terminals Conditions                              |  |  |
| 7  |  |  | The body as a whole. Skin & its appendages             |  |  |
| 8  |  |  | Gastrointestinal Tract<br>Respiratory system           |  |  |
| 9  |  |  | Cardiovascular System<br>Blood & lymphatic system      |  |  |
| 10 |  |  | Musculoskeletal system<br>Urogenital system.           |  |  |
| 11 |  |  | Endocrine system                                       |  |  |
| 12 |  |  | Nervous system                                         |  |  |
| 13 |  |  | Special senses                                         |  |  |
| 14 |  |  | Oncology                                               |  |  |
| 15 |  |  | Speciality related termes                              |  |  |

### 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

### 12. Learning and Teaching Resources

|                                                                    |                                       |
|--------------------------------------------------------------------|---------------------------------------|
| Required textbooks (curricular books, if any)                      |                                       |
| Main references (sources)                                          | The principle of Medical terms        |
| Recommended books and references (scientific journals, reports...) | Books and references on Medical terms |
| Electronic References, Websites                                    | Internet network                      |

## **First Stage /Second Course**

## Course Description Form

|                                                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
|---------------------------------------------------------------------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|-------------------|
| 1. Course Name:                                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| Anatomy(2)                                                          |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 2. Course Code:                                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
|                                                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 3. Semester / Year:                                                 |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| Courses / second course / first stage                               |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 4. Description Preparation Date:                                    |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 2025                                                                |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 5. Available Attendance Forms:                                      |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| Theory and practical lectures                                       |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 6. Number of Credit Hours (Total) / Number of Units (Total)         |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 30 HR/ units: 4                                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 7. Course administrator's name (mention all, if more than one name) |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| Name: Dr. muntahaa abdullah                                         |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 8. Course Objectives                                                |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| Course Objectives                                                   |       | <ul style="list-style-type: none"> <li>• Identify the principles of anatomy and their relationship to other sciences.</li> <li>• Identify the body's systems and organ structure.</li> <li>• Identify the precise structure of the organ.</li> <li>• Focus on the primary information pertaining to each organ, which is represented by its composition, location, and function.....</li> </ul> |                      |                 |                   |
| 9. Teaching and Learning Strategies                                 |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| Strategy                                                            |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| 10. Course Structure                                                |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |
| Week                                                                | Hours | Required Learning Outcomes                                                                                                                                                                                                                                                                                                                                                                      | Unit or subject name | Learning method | Evaluation method |
|                                                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                 |                      |                 |                   |

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |  |  |  |
|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  |  | <p>CNS structure and functions</p> <p>PNS spinal nerves<br/>Sensory and motor nerves systems</p> <p>GIT system ; parts and structure of wall and stomach</p> <p>Salivary gland structure , pancreas and Gall Bladder .</p> <p>Liver anatomy structure and function</p> <p>Urinary system kidney , ureter , urinary bladder , urethra</p> <p>Muscular system</p> <p>Reproductive system - male genitalia .</p> <p>Female reproductive organs .</p> <p>Endocrine glands anatomy and function</p> <p>Endocrine glands anatomy and function</p> <p>Special sense anatomy</p> <p>Skeletal system anatomy .</p> <p>The development and inheritance .</p> |  |  |  |
|--|--|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|

### 11. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

### 12. Learning and Teaching Resources

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

## Course Description Form

|                                                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
|----------------------------------------------------------------------|-------|----------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------|-------------------|
| 12. Course Name:                                                     |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| <b>Physiology</b>                                                    |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 13. Course Code:                                                     |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
|                                                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 14. Semester / Year:                                                 |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| <b>Courses / second course / first stage</b>                         |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 15. Description Preparation Date:                                    |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 2025                                                                 |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 16. Available Attendance Forms:                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| <b>Theoretical and practical lectures</b>                            |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 17. Number of Credit Hours (Total) / Number of Units (Total)         |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 30 hours, number of units: 4                                         |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 18. Course administrator's name (mention all, if more than one name) |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| A.I Kazim Hamza Jubair                                               |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 19. Course Objectives                                                |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| Course Objectives                                                    |       |                            | <ul style="list-style-type: none"> <li>Identify the principles of physiology and its relationship to other sciences.</li> <li>Distinguishing between the normal physiological state of the body and a pathological condition.</li> <li>To be able to use laboratory devices and tools.</li> <li>Conducting blood tests and other body fluids...</li> </ul> |                 |                   |
| 20. Teaching and Learning Strategies                                 |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| Strategy                                                             |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| 21. Course Structure                                                 |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |
| Week                                                                 | Hours | Required Learning Outcomes | Unit or subject name                                                                                                                                                                                                                                                                                                                                       | Learning method | Evaluation method |
|                                                                      |       |                            |                                                                                                                                                                                                                                                                                                                                                            |                 |                   |

|  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |  |  |  |
|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  |  | <p>Definition of physiology; cell physiology; cell membrane components and structure.</p> <p>Movement of fluid, solutes and gases across the cell membrane.</p> <p>Muscular system: types &amp; characteristics.</p> <p>Contraction mechanisms; fatigue, muscular pain</p> <p>Types of nerve cells, functions of nerve impulse, synapses and reflexes</p> <p>Action potential of nerve and muscle fibers</p> <p>Blood; functions, components, plasma and serum</p> <p>Red blood cells, shape, origin, Hb structure and Anemia</p> <p>W.B.Cs, platelets; functions, origin, structure</p> <p>Blood clotting mechanism</p> <p>Cardiovascular system, heart valve cycle, HR conductive system.</p> |  |  |  |
|--|--|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|

|  |  |                                                                                                                                                                                                                                       |  |  |  |
|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
|  |  | Heart sounds and murmurs, ECG<br>Blood pressure<br>Respiratory system, Pleura, Types of mechanism of respiration.<br>Oxygen Transporting and exchange Carbon dioxide transporting and exchange, Lung V and capacity, types of Hypoxia |  |  |  |
|--|--|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|

## 22. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

## 23. Learning and Teaching Resources

|                                                                    |                   |
|--------------------------------------------------------------------|-------------------|
| Required textbooks (curricular books, if any)                      | No specific Books |
| Main references (sources)                                          |                   |
| Recommended books and references (scientific journals, reports...) |                   |
| Electronic References, Websites                                    | Internet          |

## Course Description Form

|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|--------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|
| 24.                      | Course Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          | Medical Physics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 25.                      | Course Code:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 26.                      | Semester / Year:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          | The second course / 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 27.                      | Description Preparation Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          | 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 28.                      | Available Attendance Forms:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          | Class Attendance                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 29.                      | Number of Credit Hours (Total) / Number of Units (Total)                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          | 30 hours / 4 units                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 30.                      | Course administrator's name (mention all, if more than one name)                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          | 1. Name: Pro. Dr. Ali Khalaf Hasan<br>Email: <a href="mailto:alikh.alsinayyid@uokufa.edu.iq">alikh.alsinayyid@uokufa.edu.iq</a>                                                                                                                                                                                                                                                                                                                                                                                                        |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 31.                      | Course Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 35%; vertical-align: top;"><b>Course Objectives</b></td> <td> 1 Identify the general concepts of medical physics<br/> 2. Identify the most important branches and general specializations in medical physics -<br/> 3. Identify the most important laws of physics related to curriculum..... </td> </tr> </table>                                                                                                                           | <b>Course Objectives</b> | 1 Identify the general concepts of medical physics<br>2. Identify the most important branches and general specializations in medical physics -<br>3. Identify the most important laws of physics related to curriculum.....                                                                                                                                      |  |  |
| <b>Course Objectives</b> | 1 Identify the general concepts of medical physics<br>2. Identify the most important branches and general specializations in medical physics -<br>3. Identify the most important laws of physics related to curriculum.....                                                                                                                                                                                                                                                                                                            |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
| 32.                      | Teaching and Learning Strategies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |
|                          | <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 20%; vertical-align: top;"><b>Strategy</b></td> <td> 1. Lecture method, dialogue discussion, presenting examples, and discussing information via the Internet<br/> 2. Daily oral and written exams, monthly exams, daily participation during lectures, participating in discussion and solving questions, preparing reports or up-to-date information about medical physics are included in the prescribed curriculum. </td> </tr> </table> | <b>Strategy</b>          | 1. Lecture method, dialogue discussion, presenting examples, and discussing information via the Internet<br>2. Daily oral and written exams, monthly exams, daily participation during lectures, participating in discussion and solving questions, preparing reports or up-to-date information about medical physics are included in the prescribed curriculum. |  |  |
| <b>Strategy</b>          | 1. Lecture method, dialogue discussion, presenting examples, and discussing information via the Internet<br>2. Daily oral and written exams, monthly exams, daily participation during lectures, participating in discussion and solving questions, preparing reports or up-to-date information about medical physics are included in the prescribed curriculum.                                                                                                                                                                       |                          |                                                                                                                                                                                                                                                                                                                                                                  |  |  |

### 33. Course Structure

| Week | Hours                         | Required Learning Outcomes                                                                                                                                                          | Unit or subject name                                                                                                                                                                                                                                                                                                                                                                                                                                      | Learning method                  | Evaluation method                                                |
|------|-------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|------------------------------------------------------------------|
| 1-13 | 2 theoretical<br>+4 practical | 1. Preparing the student and making him familiar with all types of scientific terminology that are used in his field of work<br>2. Gain knowledge of basic medical physics concepts | 1. Physics of cardiovascular system<br>2. Laser in medicine<br>3. Electricity within the body<br>4. Application of electricity and magnetism in medicine<br>5. Light in medicine<br>, sound in medicine<br>6. Physics of nuclear medicine, radiotherapy, radiation protection<br>7. Solar energy Technology<br>8. Nanotechnology in renewable energy system<br>9. Energy sector products using nanomaterials<br>10. Nanotechnology to Hydrogen production | Lectures, discussion, questions. | Group work exercises, daily (oral and written) and monthly exams |

### 34. Course Evaluation

The semester exam, activities for students, and quick exams constitute 30%, and the end-of-course exam constitutes 70%.

### 35. Learning and Teaching Resources

|                                               |                                                                   |
|-----------------------------------------------|-------------------------------------------------------------------|
| Required textbooks (curricular books, if any) | There is no specific book                                         |
| Main references (sources)                     | Introduction to Physics in Modern Medicine (Suzanne Amador 2002), |

|                                                                    |                                                                             |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Recommended books and references (scientific journals, reports...) | Any book that deals with the basics of medical physics and its applications |
| Electronic References, Websites                                    | Any site that deals with medical physics                                    |

## Course Description Form

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 36.               | Course Name:                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                   | Human right                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 37.               | Course Code:                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 38.               | Semester / Year:                                                                                                                                                                                                                                                                                                                                                                                                                 |
|                   | The second course / 2025                                                                                                                                                                                                                                                                                                                                                                                                         |
| 39.               | Description Preparation Date:                                                                                                                                                                                                                                                                                                                                                                                                    |
|                   | 2025                                                                                                                                                                                                                                                                                                                                                                                                                             |
| 40.               | Available Attendance Forms:                                                                                                                                                                                                                                                                                                                                                                                                      |
|                   | Class Attendance                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 41.               | Number of Credit Hours (Total) / Number of Units (Total)                                                                                                                                                                                                                                                                                                                                                                         |
|                   | 30ht/2unite                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 42.               | Course administrator's name (mention all, if more than one name)                                                                                                                                                                                                                                                                                                                                                                 |
|                   | 2. Name: MSc Ali akbar                                                                                                                                                                                                                                                                                                                                                                                                           |
| 43.               | Course Objectives                                                                                                                                                                                                                                                                                                                                                                                                                |
| Course Objectives | <ul style="list-style-type: none"> <li>1. enable the student to understand the fundamental principles of human rights.</li> <li>2. enable the student to distinguish between media manipulations that contradict human rights and those that align with them.</li> <li>3. develop an aware individual who understands his rights and responsibilities</li> </ul>                                                                 |
| 44.               | Teaching and Learning Strategies                                                                                                                                                                                                                                                                                                                                                                                                 |
| Strategy          | <ul style="list-style-type: none"> <li>1. Lecture method, dialogue discussion, presenting examples, and discussing information via the Internet</li> <li>2. Daily oral and written exams, monthly exams, daily participation during lectures, participating in discussion and solving questions, preparing reports</li> </ul> <p>up-to-date information about medical physics are not included in the prescribed curriculum.</p> |

#### 45. Course Structure

| Week | Hours         | Required Learning Outcomes | Unit or subject name                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | Learning method                  | Evaluation method |
|------|---------------|----------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|-------------------|
| 1-13 | 2 theoretical |                            | <ol style="list-style-type: none"> <li>1. The Concept of Human Rights</li> <li>2. The Fundamental Characteristics of Human Rights</li> <li>3. Types of Human Rights</li> <li>4. Categories of Human Rights</li> <li>5. Human Rights in Ancient Civilizations</li> <li>6. Human Rights in the Middle Ages</li> <li>7. Human Rights in Islam and the Divine Religions</li> <li>8. Human Rights in Renaissance Societies</li> <li>9. Human Rights in the Modern Age</li> <li>10. Human Rights in the Modern Ages (Part 2)</li> <li>11. Non-Governmental Organizations and Human Rights</li> <li>12. Guarantees for the Respect and Protection of Human Rights at the National and International Levels</li> <li>13. Water and Environmental Awareness in Iraq</li> <li>14. Water and Environmental Awareness in Iraq (Part 2)</li> <li>15. The Concept of Equality</li> </ol> | Lectures, discussion, questions. |                   |

#### 46. Course Evaluation

The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

#### 47. Learning and Teaching Resources

|                                                                    |                                                                            |
|--------------------------------------------------------------------|----------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | Human Rights: A New Vision: Moncef Marzouki                                |
| Main references (sources)                                          | Introduction to Understanding the Human Rights System: Mohamed Sayed Saeed |
| Recommended books and references (scientific journals, reports...) |                                                                            |
| Electronic References, Websites                                    | The State and Democracy: Jamil Hilal                                       |

## Course Description Form

| 48.                  | Course Name:                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |                      |                 |                   |
|----------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|----------------------|-----------------|-------------------|
|                      | Medical terminology II                                                                                                                                                                                                                                                                                                                                              |                                                                                                     |                      |                 |                   |
| 49.                  | Course Code:                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |                      |                 |                   |
| 50.                  | Semester / Year:                                                                                                                                                                                                                                                                                                                                                    |                                                                                                     |                      |                 |                   |
|                      | The second course / 2025                                                                                                                                                                                                                                                                                                                                            |                                                                                                     |                      |                 |                   |
| 51.                  | Description Preparation Date:                                                                                                                                                                                                                                                                                                                                       |                                                                                                     |                      |                 |                   |
|                      | 2025                                                                                                                                                                                                                                                                                                                                                                |                                                                                                     |                      |                 |                   |
| 52.                  | Available Attendance Forms:                                                                                                                                                                                                                                                                                                                                         |                                                                                                     |                      |                 |                   |
|                      | Class Attendance                                                                                                                                                                                                                                                                                                                                                    |                                                                                                     |                      |                 |                   |
| 53.                  | Number of Credit Hours (Total) / Number of Units (Total)                                                                                                                                                                                                                                                                                                            |                                                                                                     |                      |                 |                   |
|                      | 15hr/1 unite                                                                                                                                                                                                                                                                                                                                                        |                                                                                                     |                      |                 |                   |
| 54.                  | Course administrator's name (mention all, if more than one name)                                                                                                                                                                                                                                                                                                    |                                                                                                     |                      |                 |                   |
|                      | A.L Mohammed Sareem Hamza                                                                                                                                                                                                                                                                                                                                           |                                                                                                     |                      |                 |                   |
| 55.                  | Course Objectives                                                                                                                                                                                                                                                                                                                                                   |                                                                                                     |                      |                 |                   |
| Course Objectives    |                                                                                                                                                                                                                                                                                                                                                                     | student should be able to distinguish roots, suffixes, .prefixes, and word endings in medical terms |                      |                 |                   |
| 56.                  | Teaching and Learning Strategies                                                                                                                                                                                                                                                                                                                                    |                                                                                                     |                      |                 |                   |
| Strategy             | 1.Lecture method, dialogue discussion, presenting examples, and discussing information via the Internet<br>2. Daily oral and written exams, monthly exams, daily participation during lectures, participating in discussion and solving questions, preparing reports<br>up-to-date information about medical physics are not included in the prescribed curriculum. |                                                                                                     |                      |                 |                   |
| 57. Course Structure |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                     |                      |                 |                   |
| Week                 | Hours                                                                                                                                                                                                                                                                                                                                                               | Required Learning Outcomes                                                                          | Unit or subject name | Learning method | Evaluation method |
|                      |                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                     |                      |                 |                   |

|      |                  |  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                  |  |
|------|------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--|
| 1-13 | 2<br>theoretical |  | <p>Introduction-structural analysis</p> <ul style="list-style-type: none"> <li>- Basic rules of medical word Building.</li> </ul> <p>Major suffixes- suffixes denoting a state or condition</p> <p>Word terminals.</p> <p>Conditions.</p> <p>The body as a whole.</p> <p>Skin &amp; its appendages.</p> <p>Gastrointestinal Tract.</p> <p>Respiratory system.</p> <p>Cardiovascular System.</p> <p>Blood &amp; lymphatic system</p> <p>Musculoskeletal system</p> <p>Urogenital system.</p> <p>Endocrine system.</p> <p>Nervous system.</p> <p>Special senses.</p> <p>Oncology.</p> <p>Speciality related termes.</p> | Lectures, discussion, questions. |  |
|------|------------------|--|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------|--|

#### 58. Course Evaluation

The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

#### 59. Learning and Teaching Resources

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

## Course Description Form

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 60.               | Course Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                   | <b>Biochemistry</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 61.               | Course Code:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 62.               | Semester / Year:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                   | <b>Courses / first course / first stage</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 63.               | Description Preparation Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|                   | 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 64.               | Available Attendance Forms:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|                   | <b>Theoretical and practical lectures</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| 65.               | Number of Credit Hours (Total) / Number of Units (Total)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
|                   | 30 hr/ 4 unit                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 66.               | Course administrator's name (mention all, if more than one name)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|                   | Name: Abdulhussein jaafer shamsah                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| 67.               | Course Objectives                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Course Objectives | <ol style="list-style-type: none"> <li>1. To be able to understand the basic principles of biochemistry and their applications.</li> <li>2. To be able to relate diseases to abnormal changes in blood and other body components.</li> <li>3. To be able to collect and handle biological samples.</li> <li>4. To be able to use and maintain necessary equipment and tools.</li> <li>5. To be able to quantify and characterize the components of blood and other body fluids.</li> <li>6. To be able to work safely in laboratories.</li> </ol> |
| 68.               | Teaching and Learning Strategies                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| Strategy          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| 69.               | Course Structure                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |

| Week    | Hours | Required Learning Outcomes                                                                                                                                                                             | Unit or subject name | Learning method | Evaluation method |
|---------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|-------------------|
| first   |       |                                                                                                                                                                                                        |                      |                 |                   |
| second  |       | Metabolism of protein abnormalities.<br>Enzymes, definition, classification, general properties, function.<br>Factors affecting enzymes activity, enzyme inhibition.<br>Enzymes in clinical diagnosis. |                      |                 |                   |
| third   |       | Vitamins and coenzymes, fat soluble vitamins, water soluble vitamins.                                                                                                                                  |                      |                 |                   |
| fourth  |       | Nutrition and energy requirements.<br>Hormones, definition, chemical nature, steroid hormones, proteins, amines.                                                                                       |                      |                 |                   |
| fifth   |       | Liver function tests, bilirubin, conjugated and non conjugated, bile pigment, Brom Sulfone Phthalien (BSP), diagnosis of various types of jaundice.                                                    |                      |                 |                   |
| sixth   |       | Liver diseases, hepatitis, cirrhosis, necrosis.                                                                                                                                                        |                      |                 |                   |
| Seventh |       |                                                                                                                                                                                                        |                      |                 |                   |

|            |  |                                                                                                                                              |  |  |  |
|------------|--|----------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|
| Eighth     |  | Changes in serum enzymes in liver disease.                                                                                                   |  |  |  |
| ninth      |  | Biosynthesis and catabolism of fatty acids                                                                                                   |  |  |  |
| tenth      |  | Steroid Biosynthesis, Nitrogen metabolism                                                                                                    |  |  |  |
| eleventh   |  | Kidney function tests, measuring glomerular filtration, tubular filtration, renal blood flow.                                                |  |  |  |
| twelfth    |  | Formation and composition of urine, changes in urine volume, specific gravity                                                                |  |  |  |
| thirteenth |  | constituents                                                                                                                                 |  |  |  |
| fourteenth |  | Urea, urea clearance test, creatinine, creatinine clearance test, insulin test, phenylsulfonylurea (PSP), concentration test, dilution test. |  |  |  |
| Fifteenth  |  |                                                                                                                                              |  |  |  |

#### 70. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

#### 71. Learning and Teaching Resources

|                                               |                                                                            |
|-----------------------------------------------|----------------------------------------------------------------------------|
| Required textbooks (curricular books, if any) | There is no specific book.                                                 |
| Main references (sources)                     | Any book that covers the basics of general chemistry and its applications. |

|                                                                    |                                                     |
|--------------------------------------------------------------------|-----------------------------------------------------|
| Recommended books and references (scientific journals, reports...) | Any website that covers the topic of gen chemistry. |
| Electronic References, Websites                                    | There is no specific book.                          |

## Course Description Form

|                   |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|-------------------|------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| 72.               | Course Name:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                   | <b>Pathology and Hematology</b>                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 73.               | Course Code:                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                   |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 74.               | Semester / Year:                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                   | <b>Courses / first course / first stage</b>                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 75.               | Description Preparation Date:                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                   | 2025                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 76.               | Available Attendance Forms:                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                   | <b>Theoretical and practical lectures</b>                        |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 77.               | Number of Credit Hours (Total) / Number of Units (Total)         |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                   | 30hr/ 4 unit                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 78.               | Course administrator's name (mention all, if more than one name) |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
|                   | Asst. Dr. Israa Hamza Jassim                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 79.               | Course Objectives                                                |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Course Objectives |                                                                  | <ol style="list-style-type: none"> <li>1. To be able to understand the basic principles of biochemistry and their applications.</li> <li>2. To be able to relate diseases to abnormal changes in blood and other body components.</li> <li>3. To be able to collect and handle biological samples.</li> <li>4. To be able to use and maintain necessary equipment and tools.</li> <li>5. To be able to quantify and characterize the components of blood and other body fluids.</li> <li>6. To be able to work safely in laboratories.</li> </ol> |  |
| 80.               | Teaching and Learning Strategies                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| Strategy          |                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |
| 81.               | Course Structure                                                 |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |  |

| Week | Hours | Required Learning Outcomes                                                                                                                                                                                                                                                                                                                                                                                                                                              | Unit or subject name | Learning method | Evaluation method |
|------|-------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|-----------------|-------------------|
|      |       | Cell Injury and Death<br>Inflammation<br><br>Healing and Repair<br><br>Carcinogenesis<br>Neoplasia<br><br>Genetic Diseases<br><br>Hemodynamic Disorders I<br>Hemodynamic Disorders II<br><br>Red Blood Cell Disorders<br>White Blood Cell Disorders<br>Platelet and Coagulation Disorders<br>Cardiovascular and Respiratory Pathology<br>Liver, Pancreas, and GIT Pathology<br>Renal and Urinary Pathology<br><br>Reproductive, Endocrine, and Nervous System Pathology |                      |                 |                   |

## 82. Course Evaluation

Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports .... etc

## 83. Learning and Teaching Resources

|                                                                    |                                                                        |
|--------------------------------------------------------------------|------------------------------------------------------------------------|
| Required textbooks (curricular books, if any)                      | There is no specific book.                                             |
| Main references (sources)                                          | Any book that covers the basics of gen chemistry and its applications. |
| Recommended books and references (scientific journals, reports...) | Any website that covers the topic of gen chemistry.                    |
| Electronic References, Websites                                    | There is no specific book.                                             |