

Course description form

| Course name | | | | | |
|--|---------------------|--|--|-------|-----------------|
| General Physiology | | | | | |
| Course Code | | | | | |
| Semester/Year | | | | | |
| year | | | | | |
| Date this description was prepared : | | | | | |
| 2024-2-20 | | | | | |
| Available forms of attendance :- | | | | | |
| Number of study hours (total)/number of units (total) | | | | | |
| 4\6 | | | | | |
| Name of the course administrator (if more than one name is mentioned) | | | | | |
| Name :Lecturer . Dr. Alaa Hashem Muhammad Qutb Asst . Lecturer. Ban Jassim Sadoon | | | | | |
| Email:- | | | | | |
| Course objectives | | | | | |
| Objectives of the study subject | | Identify the functions of different body systems Describe the mechanism of operation of the various body systems and the sequence of physiological events accompanying them . To distinguish between normal and abnormal functions of different body systems Expanding knowledge through periodicals, medical books, and the Internet | | | |
| Teaching and learning strategies | | | | | |
| The strategy | | Discussion and dialogue in presenting the topic - using modern illustrative methods such as data shows and scientific applied programs - clarifying the material in a simplified manner and using modern technology in education - raising questions and deriving answers from them - ensuring the method of research and conclusion - linking the scientific material to relevant external scientific materials to reach the goal The purpose of the lesson | | | |
| Course structure | | | | | |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| Daily exam | Theoretical lecture | Introduction to physiology, cells, cell components and functions | Introduction to physiology | 6 | 1 st |
| Daily exam | Theoretical lecture | Transport across cell membrane, extracellular and intracellular fluid | Transport across the plasma membrane , fluids outside and inside cells | 6 | 2 nd |
| Daily exam | Theoretical lecture | Skeletal muscle, structure, contraction, muscle pain, muscle tone and muscle fatigue | Skeletal muscle, its structure, muscle contraction, muscle pain, muscle tone, muscle fatigue | 6 | 4 rd |
| Daily exam | Theoretical lecture | Nerve cells, shape, type, structure, impulse, signal | Nerve cells, shape , type , structure , impulse , signal | 6 | 5 th |
| Daily exam | Theoretical lecture | Action potential | Action potential | 6 | 6 th |
| Daily exam | Theoretical lecture | Blood, function of blood, serum, plasma | Blood types and functions Serum and plasma | 6 | 7 th |

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|-------------------|---------------------|---|--|-------|------------------|
| Daily exam | Theoretical lecture | Erythrocyte, hemoglobin and, Anemia. Role of erythropoietin in erythrocyte production | Red blood cells Hemoglobin and anemia The role of erythropoietin in the formation of red blood cells | 6 | 8 th |
| Daily exam | Theoretical lecture | platelet and WBC | White blood cells And platelets | 6 | 9 th |
| Daily exam | Theoretical lecture | clotting blood | Blood clotting | 6 | 10 th |
| Daily exam | Theoretical lecture | Cardiovascular system, heart valve cycle, HR conductive | heart and blood vessels Functions and heart valves | 6 | 11 th |
| Daily exam | Theoretical lecture | Heart sound and murmurs, ECG | ECG sounds the heart | 6 | 12 th |
| Daily exam | Theoretical lecture | Blood Pressure | blood pressure | 6 | 13 th |
| Daily exam | Theoretical lecture | Respiratory system | Respiratory system | 6 | 14 th |
| Daily exam | Theoretical lecture | Oxygen transport and exchange. exchange | Gaseous exchange | 6 | 15 th |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| Daily exam | Practical lecture | Electron microscope | The microscope, type, parts, how to use it. | 6 | 1 st |
| Daily exam | Practical lecture | Blood and blood collection The difference between plasma and serum | Hematology, collection of blood, capillary blood ; venous blood; plasma and serum. | 6 | 2 nd |
| Daily exam | Practical lecture | Hemoglobin and methods of measuring it | Hemoglobin estimation by acid hematin method | 6 | 4 th |
| Daily exam | Practical lecture | Compressed blood volume | Packed cell volume (PCV). | 6 | 5 th |
| Daily exam | Practical lecture | Red blood cells | Red blood cells count. | 6 | 6 th |
| Daily exam | Practical lecture | White blood cells | Total leukocyte count | 6 | 7 th |
| Daily exam | Practical lecture | Examination of retinal cell numbers | Reticulocyte count test | 6 | 8 th |
| Daily exam | Practical lecture | Normal blood volume | Normal blood standard | 6 | 9 th |

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| Daily exam | Practical lecture | Blood smear | Blood smear; staining. | 6 | 10 th |
| Daily exam | Practical lecture | Variation in the number of white blood cells | Differential leukocyte count (types of WBC). | 6 | 11 th |
| Daily exam | Practical lecture | The shape of blood cells | Study of morphology of red blood cells. | 6 | 12 th |
| Daily exam | Practical lecture | Movement of blood cells | Scientific movies show of blood | 6 | 13 th |
| Daily exam | Practical lecture | Methods of examining red blood cells | Erythrocyte sedimentation rate by westergren method | 6 | 14 th |
| Daily exam | Practical lecture | Check ESR | ESR by wintrod method. | 6 | 15 th |
| Course evaluation | | | | | |
| Daily, quarterly and monthly exams | | | | | |
| Learning and teaching resources | | | | | |
| Medical physiology and general physiology book | | Required textbooks (methodology, if any) | | | |
| All books on physiology, such as Ganingham , Gytun , lippincot , And Vander. | | Main references (sources) | | | |
| Scientific journals from the Internet, scientific reports and research from the Internet, new ideas and research that are presented in conferences and seminars and which are approved and published in later research. | | Recommended supporting books and references (scientific journals reports....) | | | |
| Free Full, Science Direct, Pub Med | | Electronic references, Internet sites | | | |

Course description form

| Course Name | | | | | |
|---|-----------------------------------|---|--|-------|----------|
| Anatomy 1 | | | | | |
| Course Code | | | | | |
| Semester/year | | | | | |
| year | | | | | |
| Date this description was prepared | | | | | |
| 2-2-2024 | | | | | |
| Available forms of attendance | | | | | |
| Number of study hours (total)/number of units (total) | | | | | |
| 4\6 | | | | | |
| Name of the course administrator (if more than one name is mentioned) | | | | | |
| Name : Lecturer .. Dr.. Zahraa Saleh Mahdi +Asst. Lecturer . Bashir Ali Hassan Asst. Lecturer .Laqaa Abdul Karim abdalkareem@alzahraa.edu.iq zahraa.mahdi@alzahraa | | | | | |
| Course objectives | | | | | |
| Objectives of the study subject | | <ul style="list-style-type: none"> • The course aims for the student to be familiar with the anatomy of the human body, organs, and tissues, as well as to know the relationship between them | | | |
| Teaching and learning strategies | | | | | |
| The strategy | | <ul style="list-style-type: none"> • Using theoretical lectures in college classrooms. • Watching anatomical videos and posters in the laboratory to teach the student in person. • Teaching the student the concepts of general anatomy, in addition to adopting additional sources to enrich the lectures with modern concepts of anatomy. | | | |
| Course structure | | | | | |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| Daily and monthly exams | theoretical and practical lecture | Introduction, anatomical terms | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 1 |
| Daily and monthly exams | theoretical and practical lecture | Body cavities and its organs | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 2 |
| Daily and monthly exams | theoretical and practical lecture | Superficial anatomy of human body | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 3 |
| Daily and monthly exams | theoretical and practical lecture | human body tissues; types and characteristics . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 4 |
| Daily and | theoretical and | Skin anatomy and its functions skin | The student's knowledge | 6 | 5 |

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|-------------------------|-----------------------------------|---|--|---|----|
| monthly exams | practical lecture | color . | of the scientific subject and awareness of scientific, mental, and professional skills | | |
| Daily and monthly exams | theoretical and practical lecture | General skeletal structure (Skull, and neck .) | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 6 |
| Daily and monthly exams | theoretical and practical lecture | Vertebral column structure, numbers and its function . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 7 |
| Daily and monthly exams | theoretical and practical lecture | Diaphragm and abdominal wall muscles . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 8 |
| Daily and monthly exams | theoretical and practical lecture | Anatomy of heart, wall, valve and its function | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 9 |
| Daily and monthly exams | theoretical and practical lecture | Structure of blood vessels wall arteries, veins and capillaries . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 10 |
| Daily and monthly exams | theoretical and practical lecture | Lymphatic system – lymph glands . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 11 |
| Daily and monthly exams | theoretical and practical lecture | Respiratory system – upper respiratory tract . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 12 |
| Daily and monthly exams | theoretical and practical lecture | Respiratory system-lower respiratory tract . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 13 |
| Daily and monthly exams | theoretical and practical lecture | Alveoli-lungs-pleural activity . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 14 |
| Daily and monthly exams | theoretical and practical lecture | Upper and lower edge | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 15 |
| Daily and monthly exams | theoretical and practical lecture | CNS structure and functions | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 1 |
| Daily and monthly exams | theoretical and practical lecture | PNS spinal nerves | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 2 |
| Daily and monthly exams | theoretical and practical lecture | Sensory and motor nerves systems | The student's knowledge of the scientific subject and awareness of | 6 | 3 |

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|--|-----------------------------------|---|--|---|----|
| | | | scientific, mental, and professional skills | | |
| Daily and monthly exams | theoretical and practical lecture | GIT system; parts and structure of wall and stomach . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 4 |
| Daily and monthly exams | theoretical and practical lecture | Salivary gland structure, pancreases and gallbladder . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 5 |
| Daily and monthly exams | theoretical and practical lecture | Liver anatomy structure and functions | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 6 |
| Daily and monthly exams | theoretical and practical lecture | Urinary system kidney, ureter, urinary bladder, urethra | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 7 |
| Daily and monthly exams | theoretical and practical lecture | Muscular system . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 8 |
| Daily and monthly exams | theoretical and practical lecture | Reproductive system – male genitalia . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 9 |
| Daily and monthly exams | theoretical and practical lecture | Female reproductive organs | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 10 |
| Daily and monthly exams | theoretical and practical lecture | Endocrine glands-anatomy and function . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 11 |
| Daily and monthly exams | theoretical and practical lecture | Endocrine glands-anatomy and function . | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 12 |
| Daily and monthly exams | theoretical and practical lecture | Special sense anatomy | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 13 |
| Daily and monthly exams | theoretical and practical lecture | Skeletal system anatomy | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 14 |
| Daily and monthly exams | theoretical and practical lecture | The development and inheritance | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 6 | 15 |
| Course evaluation | | | | | |
| <input checked="" type="checkbox"/> homework <input checked="" type="checkbox"/> Daily exams <input checked="" type="checkbox"/> Reports <input checked="" type="checkbox"/> Daily attendance | | | | | |

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|--|--|
| <input checked="" type="checkbox"/> Skills and speed of completing tasks <input checked="" type="checkbox"/> Monthly exam score <input checked="" type="checkbox"/> The student is evaluated based on his success in understanding the scientific material, practical training in the laboratory, and using skeletons to learn about the body's systems anatomically | |
| Learning and teaching resources | |
| Required textbooks (methodology, if any) | - Principles of Anatomy by Dr. Abdul Rahman Mahmoud Al Rahim, Ministry of Health Atlas of anatomy (Grantes) |
| Main references (sources) | Kingham anatomy- Oxford- London/1987 |
| Recommended supporting books and references (scientific journals reports....) | Principles of anatomy for students of medica and health colleges |
| Electronic references, Internet sites | <u>Clinical natomy grants atlas of anatomy</u> |

| Course Name | | | | | |
|--|--|---|---|-------|----------|
| Biology | | | | | |
| Course code | | | | | |
| | | | | | |
| Semester/year | | | | | |
| year | | | | | |
| Date this description was prepared | | | | | |
| 20-2-2024 | | | | | |
| Available forms of attendance:- In person | | | | | |
| | | | | | |
| Number of study hours (total)/number of units (total) | | | | | |
| 4/6 | | | | | |
| Name of the course administrator (if more than one name is mentioned) | | | | | |
| Name: Dr. Farah Amer Abbas Asst. Lecturer . Fatima Salem Obaid Asst. Lecturer .Hadeel Salah Mahdi Email:- Fatimah s.obaid@gmail.com | | | | | |
| Course objectives | | | | | |
| Objectives of the study subject | Understanding and studying the biology of the human body Introducing the student and giving him all the scientific information regarding the types of cells and tissues found in the human body | | | | |
| Teaching and learning strategies | | | | | |
| The strategy | Display slides of biological material on the screen and study them under the microscope. Use a smart board. Asking external questions that flow into the topic | | | | |
| Course structure | | | | | |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| Daily and monthly exams | Screen use - Scientific references | Microscope, introduction to biology, prokaryotic cells Animal and plant cells | Microscope, introduction to biology, prokaryotic cells , Animal and plant cells | 6 | 1 |
| Daily and monthly exams | Screen use - Scientific references | Cell structure, types, shape and size | Cell structure, types, shape and size | 6 | 2- 3 |
| Daily and monthly exams | Screen use - Scientific references | Movement inside and outside cells: diffusion, osmosis, active transport | Movement inside and outside cells: diffusion, osmosis, active transport | 6 | 5-4 |
| Daily and monthly exams | Screen use - Scientific references | Cells: mitosis and meiosis | Cells: mitosis and meiosis | 6 | 6 |
| Daily and monthly examinations | Screen use - Scientific references | DNA :RNA, DNA replication | RNA, DNA replication | 6 | 8-7 |
| Daily and monthly examinations | Screen use - Scientific references | Protein biosynthesis | Protein biosynthesis | 6 | 9 |
| Daily and monthly exams | Screen use - Scientific references | Human body tissues: epithelial tissues | Human body tissues: epithelial tissues | 6 | 11-10 |
| Daily and monthly exams | Screen use - Scientific references | Muscle and nervous tissue | Muscle and nervous tissue | 6 | 13-12 |
| Daily and monthly exams | Screen use - Scientific references | Connective tissues: bones and cartilage | Connective tissues: bones and cartilage | 6 | 14 |
| Daily and monthly examinations | Screen use - Scientific references | Blood and lymph | Blood and lymph | 6 | 15 |

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| Course evaluation | |
| Conducting daily examinations for female studentsa- Oral exam, practical report, monthly and final examsb- Surprising, inferential questions during the discussion between the two sidesc- | |
| Learning and teaching resources | |
| Required textbooks (methodology, if any) | A text book of human biology |
| Main references (sources) | Central Library, Internet |
| Recommended supporting books and references (scientific journals, reports....) | |
| Electronic references, Internet sites | |

Course description form

| Course Name | | | | | |
|---|-------------------------|--|--|-------|----------|
| General chemistry | | | | | |
| Course Code | | | | | |
| Semester/year | | | | | |
| year | | | | | |
| Date this description was prepared | | | | | |
| 22-2-2024 | | | | | |
| Available forms of attendance | | | | | |
| Number of study hours (total)/number of units (total) | | | | | |
| 4/6 | | | | | |
| Name of the course administrator (if more than one name is mentioned) | | | | | |
| Name :Asst . Lecturer . . Karar Hazem Salem | | | | | |
| Email: <i>karrar.salem@alzahraa.edu.iq</i> | | | | | |
| Course objectives | | | | | |
| Objectives of the study subject | | Performing various techniques of descriptive and quantitative analyzes of components in blood and other body fluids Man in health and sickness. | | | |
| Teaching and learning strategies | | | | | |
| The strategy | | Teaching and learning methods in biochemistry vary and depend on several factors, including .Students' level and cognitive abilities .Course objectives .Available capabilities The most important methods of teaching and learning in biochemistry are the following Lectures: Lectures are one of the most important teaching methods in biochemistry, as the teacher explains the basic concepts and theories of the .subject Discussions: Discussions are an effective way to enhance understanding and solve problems, as the teacher asks students questions and encourages them to .participate and discuss answers Practical applications: Practical applications are an effective way to link theoretical concepts to reality, as the teacher asks students to conduct experiments or practical projects E-learning: E-learning is a modern and educational method, where students can learn through videos and simulation programs | | | |
| Course structure | | | | | -1 |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| general questions And discuss And a daily exam | Theoretical + practical | Scope of biochemistry in health and disease, cell and cell components . | The scope of biochemistry in health and disease, the cell and cell components. | 6 | 1 |
| general questions And discuss And a daily exam | Theoretical + practical | Some aspects of physical chemistry, Gas laws, Boyle's law, Graham's Law of diffusion, Dalton's Law of partial pressure, General gas equation, the international system of units . | Some aspects of physical chemistry, gas laws, Boyle's law, Graham's law of diffusion, Dalton's law of partial pressure, the general gas equation, the International System of Units. | 6 | 2 |
| general questions And discuss And a daily exam | Theoretical + practical | Radio activity and radioactive isotopes . | Radioactivity and radioactive isotopes. | 6 | 3 |

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| general questions And discuss And a daily exam | Theoretical + practical | Solutions and methods of expressing colloidal concentrations solution . | Solutions and methods for expressing colloidal solution concentrations. | 6 | 4 |
| general questions And discuss And a daily exam | Theoretical + practical | The PH concept, acid-base balance, chemical balance, common ion | PH concept , acid-base balance, chemical balance, common ion | 6 | 5 |
| general questions And discuss And a daily exam | Theoretical + practical | Buffer and buffer systems of physiological importance in living systems . | Dielectric and buffer systems are physiologically important in living systems. | 6 | 6 |
| general questions And discuss And a daily exam | Theoretical + practical | Blood, blood components, body fluids, regulation of blood Ph and body | Blood, blood components, body fluids, regulate the pH of the blood and the body | 6 | 7 |
| general questions And discuss And a daily exam | Theoretical + practical | Water and electrolyte balance – osmotic pressure of body fluids, control of total electrolytes and body fluids . | Water and electrolyte balance – osmotic pressure of body fluids, control of total electrolytes and body fluids. | 6 | 8 |
| general questions And discuss And a daily exam | Theoretical + practical | Carbohydrates classification reactions, main carbohydrates in the human body . | Carbohydrate classification reactions, the main carbohydrates in the human body. | 6 | 9 |
| general questions And discuss And a daily exam | Theoretical + practical | Metabolism of carbohydrates, blood glucose factors controlling glucose level in blood . | Carbohydrate metabolism and blood glucose factors that control blood glucose level. | 6 | 10 |
| general questions And discuss And a daily exam | Theoretical + practical | Glucose abnormalities, diabetes mellitus, ketosis, glycosuria, glucose tolerance curve . | Glucose abnormalities, diabetes mellitus, ketosis , glycosuria, glucose tolerance curve. | 6 | 11 |
| general questions And discuss And a daily exam | Theoretical + practical | Lipids, classification, derived lipids, compound, lipids . | Lipids, classification, derived fats, compound, lipids. | 6 | 12 |
| general questions And discuss And a daily exam | Theoretical + practical | Lipid metabolism, lipid abnormalities . | Fat metabolism, lipid disorders. | 6 | 13 |
| general questions And discuss And a daily exam | Theoretical + practical | Proteins, classification, functions, peptide bonds, amino acids, chemical reactions . | Proteins, their classification, functions, peptide bonds, amino acids, chemical reactions. | 6 | 14 |
| general questions And discuss And a daily exam | Theoretical + practical | Nucleic acids and their Expression, DNA Replication, Nutation, RNA Topology . | Nucleic acids and their expression, DNA replication, RNA topology. | 6 | 15 |
| Course evaluation -2 | | | | | |
| Participation in the classroom Submitting periodic reports Weekly exams Monthly and final exams | | | | | |
| Learning and teaching resources -3 | | | | | |

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| Atkins' Physical Chemistry Organic Chemistry by Clayden Basics of biochemistry, Dr. Sami Al-Muzaffar | Required textbooks (methodology, if any) |
| Chem Libretexts Nature Chemistry Nature Biotechnology | Main references (sources) |
| Lehninger Principles of Biochemistry Stryer Biochemistry | Recommended supporting books and references (scientific journals, reports....) |
| <u>Journal of Biological Chemistry</u> <u>Google Scholar</u> | Electronic references, Internet sites |

Course description form

| Course Name | | | | | |
|---|-------------------------|---|---------------------------------|-------|----------|
| Medical Physics 1 | | | | | |
| Course Code | | | | | |
| Semester/year | | | | | |
| year | | | | | |
| Date this description was prepared | | | | | |
| 2024-20-2 | | | | | |
| Available forms of attendance | | | | | |
| Number of study hours (total)/number of units (total) | | | | | |
| 4\6 | | | | | |
| Name of the course administrator (if more than one name is mentioned) | | | | | |
| Name :- Asst. Lecturer.. Zahraa talib Asst. Lecturer. Hala Riad | | | | | |
| Course objectives | | | | | |
| Objectives of the study subject | | <ul style="list-style-type: none"> • Giving the student an idea of the material he needs in his studies in the subsequent stages • Learn about some advanced concepts in physics and how to use these concepts in medical sciences • Identify some physical ideas and their applications | | | |
| Teaching and learning strategies | | | | | |
| The strategy | | <ul style="list-style-type: none"> • . Sudden daily and continuous weekly tests • Exercises and activities in the classroom • Directing students to some websites to benefit from them | | | |
| Course structure .1 | | | | | |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| General questions and discussion | Theoretical + practical | Physics of skeleton, pressure | the pressure | 6 | 1-2 |
| General questions and discussion | Theoretical + practical | Energy, work and power of the body | Energy and work | 6 | 3-4 |
| General questions, discussion, and daily exams | Theoretical + practical | Heat and cold in medicine | Heat in medicine | 6 | 5-6 |
| General questions, discussion, and daily exams | Theoretical + practical | Specific heat, heat capacity, latent heat, thermometer and its kinds | Specific heat and heat capacity | 6 | 7-8 |
| General questions and discussion | Theoretical + practical | Boyle law diffusion and mixing of gases | Boyle's law | 6 | 9-10 |
| Monthly exam | Theoretical + practical | Physics of lung and breathing | Sound and waves | 6 | 11-12 |
| General questions and | Theoretical + practical | Evaporation of liquid, vapor pressure and boiling point | Evaporation of gases | 6 | 13-14 |

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|--|-------------------------|---|--|---|-------|
| discussion | | | | | |
| General questions and discussion | Theoretical + practical | Physics of cardiovascular system | electrical | 6 | 15-16 |
| General questions, discussion, and daily exam | Theoretical + practical | Physics of eye and vision, physics of ear and hearing | Magnetism | 6 | 17-18 |
| General questions and discussion | Theoretical + practical | Electricity within the body | electrical | 6 | 19-20 |
| General questions and discussion of group assignments | Theoretical + practical | Application of electricity and magnetism in medicine | Applications Electricity and magnetism in the body | 6 | 21-22 |
| General questions, discussion, and daily exam | Theoretical + practical | Light in medicine, sound in medicine | Light and sound in medicine | 6 | 23-24 |
| General questions and discussion | Theoretical + practical | Physics of nuclear medicine, radiotherapy, radiation protection. | Nuclear Physics | 6 | 25-26 |
| Course evaluation | | | | | |
| <ul style="list-style-type: none"> • Participation in the classroom • Submitting periodic reports • Weekly exams • Monthly and final exams | | | | | |
| Learning and teaching resources | | | | | |
| Required textbooks (methodology, if any) | | | | | |
| Main references (sources) | | 1-University Physics Volume 1 Senior Contributing Authors Samuel J. Ling, Truman State University Jeff Sunny, Loyola Marymount University William Moebs, PhD 2-Physics Laboratory Experiments 8ed 3-Experiments and Demonstrations in Physics; Bar-Ilan Physics Laboratory 2nd Ed - Yaakov Korfmacher | | | |
| Recommended supporting books and references (scientific journals, reports....) | | 1-A Student's Guide to Maxwell's Equations - D. Fleisch 2-Fundamentals Of Physics I; Mechanics, Relativity, And Thermodynamics - Ramamurti Shankar (2019) | | | |
| Electronic references, Internet sites | | | | | |

Course description form

| Course Name | | | | | |
|---|------------------------|--|--|-------|----------|
| Human rights and democracy | | | | | |
| Course Code | | | | | |
| Semester/year | | | | | |
| year | | | | | |
| Date this description was prepared | | | | | |
| 21-2-2024 | | | | | |
| Available forms of attendance | | | | | |
| Number of study hours (total)/number of units (total) | | | | | |
| 2\2 | | | | | |
| Name of the course administrator (if more than one name is mentioned) | | | | | |
| Name: Asst . Lecturer . Hussein Majeed Salman | | | | | |
| Emali: | | | | | |
| Course objectives | | | | | |
| Objectives of the study subject | | The student learns about the historical development of human rights, the role of international organizations in ensuring the protection and respect of human rights, the principles of democracy and their impact on third world countries , and the types of freedoms . | | | |
| Teaching and learning strategies | | | | | |
| The strategy | | Sudden daily and continuous weekly tests Exercises and activities in the classroom Directing students to some websites to benefit from them | | | |
| Course structure | | | | | |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| Daily exam And monthly | theoretical lecture | The concept of human rights Definition of human rights Definition of right Definition of human | The concept of human rights: Definition of human rights Definition of right Definition of human | 1 | .1 |
| Daily exam And monthly | theoretical lecture | The most basic characteristics of human rights | The most basic characteristics of human rights | 1 | .2 |
| Daily exam And monthly | theoretical lecture | Types of human rights | Types of human rights | 1 | .3 |
| Daily exam And monthly | theoretical lecture | Human rights categories | Human rights categories | 1 | .4 |
| Daily exam And monthly | theoretical lecture | Human rights in ancient civilizations | Human rights in ancient civilizations | 1 | .5 |
| Daily exam And monthly | theoretical lecture | Human rights in the Middle Ages | Human rights in the Middle Ages | 1 | .6 |
| Daily exam And monthly | theoretical lecture | Human rights in Islam and divine religions | Human rights in Islam and divine religions | 1 | .7 |
| Daily exam And monthly | theoretical lecture | Human rights in Renaissance societies | Human rights in Renaissance societies | 1 | .8 |
| Daily exam And monthly | theoretical lecture | Human rights in modern times | Human rights in modern times | 1 | .9 |
| Daily exam And monthly | theoretical lecture | Non-governmental organizations and human rights | Non-governmental organizations and human rights | 1 | .10 |
| Daily exam And monthly | theoretical lecture | Guarantees of respect and protection of human rights | Guarantees of respect and protection of human rights | 1 | .11 |
| Daily exam And monthly | theoretical lecture | Water and environmental awareness in Iraq | Water and environmental awareness in Iraq | 1 | .12 |
| Daily exam | theoretical | Water and environmental awareness | Water and | 1 | .13 |

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|--|------------------------|--|---------------------------------|---|-----|
| And monthly | lecture | in Iraq | environmental awareness in Iraq | | |
| Daily exam And monthly | theoretical lecture | The concept of equality | The concept of equality | 1 | .14 |
| Daily exam And monthly | theoretical lecture | Human rights in modern times | Human rights in modern times | 1 | .15 |
| Course evaluation | | | | | |
| Evaluating students through daily and monthly examinations Participate in the lecture General questions and discussion | | | | | |
| Learning and teaching resources | | | | | |
| Lectures on human rights and democracy | | Required textbooks (methodology, if any) | | | |
| All books that talk about human rights and democracy | | Main references (sources) | | | |
| | | Recommended supporting books and references (scientific journals, reports....) | | | |
| | | Electronic references, Internet sites | | | |

Course description form

| Course name | | | | | |
|---|---------------------|--|---|----------|----------|
| English | | | | | |
| Course Code | | | | | |
| Semester/year | | | | | |
| year | | | | | |
| Date this description was prepared | | | | | |
| 2024-20-2 | | | | | |
| Available forms of attendance | | | | | |
| Number of study hours (total)/number of units (total) | | | | | |
| 3\3 | | | | | |
| Name of the course administrator (if more than one name is mentioned) .2 | | | | | |
| Name :- Asst. Lecturer. Niran .Fadel Muhammad | | | | | |
| Email:- | | | | | |
| Course objectives | | | | | |
| Objectives of the study subject | | Make the student able to absorb, understand and memorize medical terminology and scientific and linguistic concepts to be conversant in his field of specialization in the English language. The student learns some important linguistic rules in the educational, professional and social fields. | | | |
| Teaching and learning strategies | | | | | |
| The strategy | | Using some important grammatical phrases to form some class discussions within the students specialization. | | | |
| Course structure .3 | | | | | |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| Daily and monthly exam | theoretical lecture | simple present, Simple past, Present continues | Tenses (past and present) | 3 | 1,2 |
| Daily and monthly exam | theoretical lecture | Question Words (what, where, why,.....) | Question tools | 3 | 3 |
| Daily and monthly exam | theoretical lecture | Cardinal numbers/countries/arrange letters | The original numbers | 3 | 4,5 |
| Daily and monthly exam | theoretical lecture | Medical terminology/language of medicine/ | Medical terminology and medical language | 3 | 6 |
| Daily and monthly exam | theoretical lecture | Possession, pronunciation(s)/ Pronouns all types | Possessive possession, its pronunciation, and types of pronouns | 3 | 7 |
| Daily and monthly exam | theoretical lecture | Spelling of medicine terms | Writing medical papers | 3 | 8,9 |
| Daily and monthly exam | theoretical lecture | Suffixes, Prefixes, root | Additions and root words | 3 | 10 |
| Daily and monthly exam | theoretical lecture | Body structure, Planes of the body | Body composition | 3 | 11,12 |
| Daily and monthly exam | theoretical lecture | Orientation and direction terms | Directions and directions | 3 | 13 |
| Daily and monthly exam | theoretical lecture | Body Position | Body position | 3 | 14 |
| Daily and monthly exam | theoretical lecture | Body Activities | Body activities | 3 | 15 |
| Course evaluation | | | | | |
| Monthly and final exams, in addition to evaluating oral dialogue between students | | | | | |
| Active attendance and daily participation | | | | | |
| Learning and teaching resources | | | | | |
| Required textbooks (methodology, if any) | | Headway Plus/Beginners New Student Book | | | |
| Main references (sources) | | Headway Plus/Beginners New Key Words Book | | | |

| | |
|---|--|
| Recommended supporting books and references (scientific journals, reports....) | Short Course of Medical terminology (Some Medical Terminology) |
| Electronic references, Internet sites | - |

Course description form

| Course name | | | | | |
|---|----------------------------------|---|--|-------|----------|
| Computer principles | | | | | |
| Course code | | | | | |
| . Semester/Year | | | | | |
| year | | | | | |
| Date this description was prepared | | | | | |
| 2024-20-2 | | | | | |
| Available forms of attendance | | | | | |
| Number of study hours (total)/number of units (total) | | | | | |
| 2\3 | | | | | |
| Name of the course administrator (if more than one name is mentioned) | | | | | |
| Name :- Asst . Lecturer . Wsanaa Nofal Abdel Ali +Asst . Lecturer .+ Manal Musa Abdel-Yama Asst . Lecturer .Hoda Ahmed Jameel | | | | | |
| Emali : manal.musa@alzahraa.edu.iq | | | | | |
| Huda.ahmed@alzahraa.edu.iq | | | | | |
| Course objectives | | | | | |
| Objectives of the study subject | | Providing the student with knowledge in managing and using various computer applications. | | | |
| Teaching and learning strategies | | | | | |
| The strategy | | The theoretical and explanation method is by presenting the material on the program, including PowerPoint , in the form of diagrams and pictures, in order to attract the student's attention and help him not feel bored. The practical method is to apply what was presented on the calculator and conduct daily and monthly exams. | | | |
| Course structure .4 | | | | | |
| Evaluation method | Learning method | Name of the unit or topic | Required learning outcomes | hours | the week |
| Daily and monthly exam | theoretical and particle lecture | Computer Fundamentals Computer concept, phases of the computer life cycle The development of computer generations | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 1 |
| Daily and monthly exam | theoretical and particle lecture | Computer advantages and areas of use. Computer classification in terms of purpose, size and type of data | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 2 |
| Daily and monthly exam | theoretical and particle lecture | Computer's components Computer Components Computer components, physical parts of the computer, software entities | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 3 |
| Daily and monthly exam | theoretical and particle lecture | Your personal computer, the concept of computer security and software licenses | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 4 |
| Daily and monthly exam | theoretical and particle lecture | Computer security and software licenses Computer Safety & Software Licenses | The student's knowledge of the scientific subject and awareness of scientific, mental, and | 3 | 5 |

| | | | | | |
|--|----------------------------------|--|--|---|----|
| | | | professional skills | | |
| Daily and monthly exam | theoretical and particle lecture | Ethics of the electronic world, forms of abuse, computer security, computer privacy | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 6 |
| Daily and monthly exam | theoretical and particle lecture | Computer software licenses and their types, intellectual property, electronic hacking, malware, the most important Necessary steps to protect against hacking operations, computer harm to health | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 7 |
| Daily and monthly exam | theoretical and particle lecture | Organized Operating Systems Definition of operating system, functions, goals, classification and examples For some operating systems | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 8 |
| Daily and monthly exam | theoretical and particle lecture | Operating Systems Windows operating system | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 9 |
| Daily and monthly exam | theoretical and particle lecture | Desktop components Start menu taskbar | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 10 |
| Daily and monthly exam | theoretical and particle lecture | Folders and files Icons | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 11 |
| Daily and monthly exam | theoretical and particle lecture | Performing operations on windows desktop backgrounds | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 12 |
| Daily and monthly exam | theoretical and particle lecture | Control Panel Windows Control Panel Groups (Category (| The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 13 |
| Daily and monthly exam | theoretical and particle lecture | From the control panel Defragment organizing files inside the computer, installing and deleting programs | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 14 |
| Daily and monthly exam | theoretical and particle lecture | Some common computer conditions and settings, managing the printer, setting time and date, maintaining disks Primary | The student's knowledge of the scientific subject and awareness of scientific, mental, and professional skills | 3 | 15 |
| Course evaluation | | | | | |
| Monthly and final exams, in addition to evaluating oral dialogue between students Active attendance and daily participation | | | | | |

| Learning and teaching resources | |
|--|---|
| Required textbooks (methodology, if any) | Computer basics and office applications |
| Main references (sources) | Yusr Al-Mustafa Science Series "Basics of Computer and Internet Office 2010, Dr. Ziyad Muhammad Abboud, Dar Al-Doctor for Publishing and Distribution, Baghdad 2013 |
| Recommended supporting books and references (scientific journals, reports....) | 1-Computer literacy BASICS 2012, LeBlanc, Brandon. "Alcoser look at the, windows 7. 2009 .2-Computing Fundamentals, Innovative training works USA, Inc, 2006 |
| Electronic references, Internet sites | https://www.agitraining.com/books/microsoft-officebooks/word-2010-digital-classroom-book |

Course name