1. Course Name:
laboratory instrument 1
2. Course Code:
3. Semester / Year:
First semester / First stage
4. Description Preparation Date:
13\1\2025
5. Available Attendance Forms:
Live attendance
6. Number of Credit Hours (Total) / Number of Units (Total):
Theoretical: 30 hours + Practical: 60 hours /4 units
7. Course administrator's name (mention all, if more than one name)
Name: PhD Harith abdul sahib shareef Email: harith8aljabery@gmail .com
8. Course Objectives
. Providing students with scientific knowledge about most laboratory equipment. The student should know the correct ways to use laboratory equipment and the mechanism of operation of each device
9. Teaching and Learning Strategies

Strategy	1-The student applies the correct use of the devices according to what he has learned 2- The student gains sufficient experience to use laboratory devices with high skill Values 3-The student desires to practice scientific and logical thinking to use any laboratory device He tends to participate in teamwork as a unified team to succeed i his professional life

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Syllabus of The Theoretical Course					
1	2	The student understands the topic	Introduction about to	In presence	Evaluate the lecture and conduct Quiz
2	2	The student explain the topic	Optical microscope	In presence	Evaluate the lecture and conduct Quiz
3	2	The student identify the topic	Optical microscope	In presence	Evaluate the lecture and conduct Quiz
4	2	The student classify the topic	Electron microscope	In presence	Evaluate the lecture and conduct Quiz
5	2	The	Electron	In presence	Evaluate the

		student classify the topic	microscope		lecture and conduct Quiz
6	2	The student describe the topic	Light meter and spectrometer	In presence	Evaluate the lecture and conduct Quiz
7	2	The student explain the topic	Separation devices	In presence	Evaluate the lecture and conduct Quiz
8	2	The student understands the topic	Centrifuge	In presence	Evaluate the lecture and conduct Quiz
9	2	The student explain the topic	Centrifuge	In presence	Evaluate the lecture and conduct Quiz
10	2	The student discuss the topic	incubator	In presence	Evaluate the lecture and conduct Quiz
11	2	The student report the topic	Type of incubator	In presence	Evaluate the lecture and conduct Quiz
12	2	The student recognize the topic	oven	In presence	Evaluate the lecture and conduct Quiz
13	2	The student discuss the topic	oven	In presence	Evaluate the lecture and conduct Quiz
14	2	The student explain the topic	balance	In presence	Evaluate the lecture and conduct Quiz
15			Final exam		
Syllabus of The Practical Course					
1	4	Introducing the student to the topic	General Introduction	In presence	Evaluate the lecture and conduct Quiz
2	4	Introducing the student to the device and how to use it	Light Microscope	In presence	Evaluate the lecture and conduct Quiz
3	4	Introducing the	Light Microscope	In presence	Evaluate the

		student to the device and how to use it			lecture and conduct Quiz
4	4	Introducing the student to the device – work skills	Electron Microscope	In presence	Evaluate the lecture and conduct Quiz
5	4	Introducing the student to the device	General Introduction About Spectrophotometer	In presence	Evaluate the lecture and conduct Quiz
6	4	Introducing the student to the device and how to use it	Spectrophotometer	In presence	Evaluate the lecture and conduct Quiz
7	4	Introducing the student to the device and how to use it	Spectrophotometer	In presence	Evaluate the lecture and conduct Quiz
8	4	Introducing the student to the device –work slills	General Introduction About Centrifuge	In presence	Evaluate the lecture and conduct Quiz
9	4	work skills	Centrifugation	In presence	Evaluate the lecture and conduct Quiz
10	4	work skills and cooperative work	Centrifugation	In presence	Evaluate the lecture and conduct Quiz
11	4	Introducing the student to the device	Chromatography	In presence	Evaluate the lecture and conduct Quiz
12	4	Learning the student to how to use it	Chromatography	In presence	Evaluate the lecture and conduct Quiz
13	4	Introducing the student to the device and how to use it	Electrophoresis	In presence	Evaluate the lecture and conduct Quiz
14	4	work skills	Electrophoresis	In presence	Evaluate the lecture and conduct Quiz
15	4	Introducing the student to the device and how to use it	Filtration Device	In presence	Evaluate the lecture and conduct Quiz
11. Course Evaluation					

The monthly exam score is 40 marks: / 15 marks for practical and 20marks for theoretical, 5quiz marks The final exam: 60 marks / 25 marks for practical and 35marks for theoretical	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (sources)	1. Braybrook, Julian H. "Biocompatiblity: Assessment Medical Devices and Materials. " Biocompatiblity: Assessment of Medical Devices and Materials, by Julian H. Braybrook (Editor), ISBN 0-471-96597-9. Wiley-VCH, December 1996. (1996): 246. 2- I.M. Watt, The Principles and Practice of Electron Microscopy, (Cambridge Univ. Press. Cambridge, England, 1985). 3- C.E. Lyman, D.E. Newbury, J.I. Goldstein, D.B. Williams, A.D. Romig, J.T. Armstrong, P. Echlin, C.E Fiori, D.C. Joy, E. Lifshin and Klaus-Ruediger Peters, Scanning Electron Microscopy, X-Ray Microanalysis and Analytical Electron Microscopy: A Laboratory Workbook, (Plenum Press. New York, N.Y., 1990). 4- Ferrier D. R. (2017). Lippincott illustrated reviews : biochemistry (Seventh). Wolters Kluwer. 5- stermeier, R. (2014). Electrophoresis. In: Kreysa, G. Ota, Ki., Savinell, R.F. (eds) Encyclopedia of Applied Electrochemistry. WeSpringer, New York, NY.
Recommended books and references (scientific journals, reports...)	
Electronic References, Websites	

1. Course Name:

General Chemistry 1

2. Course Code:

3. Semester / Year:

First + second semester/ 2024-2025

4. Description Preparation Date:

8/1/2025

5. Available Attendance Forms:

In classroom

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

60 Hrs theoretical + 150 Hrs practical/ 4 Units

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

Name: Dr. Maher Khanafer
Email: maherkhanafer400@gmail.com

8. Course Objectives

Course Objectives	-The student gets to know the chemistry laboratory general. -Learn how to process organic chemical elements a prepare excellent solutions and concentrations. -The student learns how to work in laboratories, ta precautions and warnings when dealing with chemicals, how conduct laboratory tests, and prepare solutions.

9. Teaching and Learning Strategies

Strategy	- Discussion and debate - Modeling and examples - Brainstorm

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Syllabus of The Theoretical Course					
1	2	-Learn how atoms are constructed -Explain the relationship between matter, atom, and	Introduction to analytical chemistry (matter , structure of atom , periodic	Visual, auditory and kinesthetic	Writing quiz

		elements -Analyze and write some common chemical formulas	table , bonds)		
2	2	-Understand how to calculate the equivalent weight of a substance -To be able to demonstrate proper solution preparation	Methods of analysis Solution (preparation of standard Solution unit, concentration , percentage , formal. Sol.	Visual, auditory and kinesthetic	Writing quiz
3	2	-Identify concentration units -Define normal solution -Apply concentration formula to describe solution types.	Molar solution , Normal solution	Visual, Auditory and kinesthetic	Writing quiz
4	2	-evaluate the model to determine its validity - to apply potential relationships between variables	Statistical treatment of analytical data(accuracy , Mean value , deviation , standard deviation mean,value systematic errors , relative error, random and absolute error)	Visual, Auditory and kinesthetic	Writing quiz
5	2	-remember the basics of chemical reactions -explain and apply the law of conservation of mass	Chemical reaction (equilibrium constant , reaction rate,catalyst solubility , ionization	Visual, Auditory and kinesthetic	Writing quiz
6	2	-To understand the differences between the three definitions of acids and bases	Neutralization (acid base theory , PH , Buffers end point) Oxidation	Visual, Auditory and kinesthetic	Writing quiz

		-Distinguish strong acids &bases From weak acids &bases	reduction Equilibria		
7	2	-Evaluate the importance of the precipitation methods -Define and understand the role of gravimetric methods.	Precipitation methods (gravimetry) formation of ppt. , type of ppt. agent titration , calculations	Visual, Auditory and kinestheti c	Writing quiz
8	2	-Understand general concepts of spectroscopy -Apply this method for structural analysis	Spectroscopy (Optical spectroscopy , Beer's law)	Visual, Auditory and kinestheti c	Writing quiz
9	2	-remember the different types of aliphatic hydrocarbons -recognize the basic properties of aliphatic hydrocarbons	Structure of carbon compounds (alkanes , ,halogen compound)	Visual, auditory and kinestheti c	Writing quiz
10	2	-remember the definition of alcohols -identify the general structure of alcohol -analyze and evaluate the development and effects of alcohols	Alcohols , classification , properties reaction	Visual, auditory and kinestheti c	Writing quiz
11	2	-differentiate between aldehydes and ketones -to investigate the physical properties and uses of some	Aldehydes And ketones properties reaction	Visual, Auditory and kinestheti c	Writing quiz

		common aldehydes and ketones			
12	2	-to develop familiarity with reactions of aldehydes which are of particular importance in biochemistry	Aldehydes and ketones properties reaction	Visual, auditory and kinesthetic	Writing quiz
13	2	-identify the general formula of carboxylic acids and amines -give examples and uses for carboxylic acids and derivatives	Carboxyl acid , amines , Aromatic , Hydrocarbon	Visual, auditory and kinesthetic	Writing quiz
14	2	-explain the formation of carboxylic acids and derivatives	Carboxyl acid , amines , Aromatic , Hydrocarbon	Visual, auditory and kinesthetic	Writing quiz
15	2	-remember the functional group of nitro compounds -identify the structural formula	Nitro compound , sulphonic acids , Phennols , aromatic carboxyl acid , polynuclear hydrocarbon	Visual, Auditory and kinesthetic	Writing quiz
16	2	-Identify the basic parts of a cell -Analyze the molecular components of cells	Cells: The units of life:1Cells and membranes. 2-Prokaryotic and eukaryotic cells. 3-Subcellular organelles	Visual, Auditory and kinesthetic	Writing quiz
17	2	-Identify common sources of carbohydrates -Explain the role of carbohydrates in providing energy	Carbohydrates: 1-Definition. 2-Biological functions. 3-Classification. Digestion and absorption	Visual, Auditory and kinesthetic	Writing quiz

18	2	-Differentiate between simple and complex carbohydrates -Analyze the structure and classification of carbohydrates	Carbohydrates: 1- Definition. 2- Biological functions. 3- Classification. Digestion and absorption	Visual, auditory and kinesthetic	Writing quiz
19	2	-Identify common sources of lipids -Explain the role of lipids providing energy	Lipids: 1- Definition. 2- Biological functions. 3- Classification. 4- Digestion and absorption	Visual, Auditory and kinesthetic	Writing quiz
20	2	Analyze the differences between saturated, unsaturated fatty acids	Lipids: 1- Definition. 2- Biological functions. 3- Classification. 4- Digestion and absorption	Visual, Auditory and kinesthetic	Writing quiz
21	2	Understand that proteins are made up of smaller building blocks called amino acids	Amino acids and Proteins: 1- Definition. 2- Biological functions. 3- Classification. 4- Digestion and absorption	Visual, Auditory and kinesthetic	Writing quiz
22	2	-Explain the process of protein synthesis -Explore the diverse functions of proteins	Amino acids and Proteins: 1- Definition. 2- Biological functions. 3- Classification. 4- Digestion and absorption	Visual, Auditory and kinesthetic	Writing quiz
23	2	Understand the functions of specific hormones	Hormones: 1- Definition. 2- Classification according to Their chemical nature. 3- Names and physiological functions of hypothalamic,	Visual, Auditory and kinesthetic	Writing quiz

			pituitary, thyroid, parathyroid, suprarenal, pancreatic and sex gland hormones		
24	2	-Classify hormones based on their chemical structure -Differentiate between water-soluble and lipid-soluble hormones and their mechanisms of action	Hormones: 1-Definition. 2-Classification according to their chemical nature. 3-Names and physiological functions of hypothalamic, pituitary,thyroid, parathyroid, suprarenal, pancreatic and sex gland hormones	Visual, Auditory and kinesthetic	Writing quiz
25	2	Describe the basic structure of nucleotides, which include sugar, a phosphate group, and nitrogenous base	Nucleotides and Nucleic acids: 1-Definition. 2-Classification of nitrogenous bases. -Biological functions of free nucleotides. 4-General structure and differences between DNA and RNA.	Visual, Auditory and kinesthetic	Writing quiz
26	2	Understand that nucleic acids are molecules found in living things and are important for inheritance and cell function	Nucleotides and Nucleic acids: 1-Definition. 2-Classification of nitrogenous bases. -Biological functions of free nucleotides. 4-General structure	Visual, Auditory and kinesthetic	Writing quiz

			and differences between DNA and RNA.		
27	2	Understand that enzymes are special proteins that help speed up chemical reactions in the body	1-General properties of enzymes: a) active sites b) catalytic efficiency c)specificity d) cofactor e)regulation f) location within the cells 2-Factors affecting reaction velocity a)Substrate concentration b) Temperature c) Ph	Visual, Auditory and kinesthetic	Writing quiz
28	2	-Recognize that enzymes are essential for digestion and other body processes -Analyze mechanisms of enzyme regulation	1-General properties of enzymes: a) active sites b) catalytic efficiency c)specificity d) cofactor e) regulation f) location within the cells 2- Factors affecting reaction velocity a) Substrate concentration b) Temperature c) Ph	Visual, Auditory and kinesthetic	Writing quiz
29	2	Recognize that vitamins help with growth, immunity, and keeping the body functioning properly	Vitamins: 1-Definition. 2-Classification (Water and Fat soluble vitamins). 3-Members of each class as regards chemical nature, sources,	Visual, Auditory and kinesthetic	Writing quiz

			daily requirement, biological function and abnormal conditions due to deficiency or toxicity		
30	2	-Identify dietary sources for different vitamins -Analyze the chemical structures of vitamins and their classification as organic compounds	Vitamins: 1- Definition. 2- Classification (Water and Fat soluble vitamins). 3- Members of each class as regards chemical nature, sources,daily requirement, biological function and abnormal conditions due to deficiency or toxicity	Visual, Auditory and kinesthetic	Writing quiz
Syllabus of The Practical Course					
1	5	-Demonstrate proper use of laboratory equipment, tools and instruments -Analyze data and interpret results in relation to scientific theories	Laboratory instruction , safety rule , equipment	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
2	5	-explain the principles of	Identification of some common	Practical lecture	Evaluate the

		qualitative analysis used in identifying cations apply schematic procedures to identify unknown cations in a mixture	inorganic cation		modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
3	5	explain the principles of qualitative analysis used in identifying anions apply schematic procedures to identify unknown anions in a mixture	Identification of some common inorganic anions	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
4	5	Describe the process of solution preparation, including dissolution,dilution , and adjustments For desired concentrations	Practic. With balances (preparation of different types of solutions.Percentage sol (w/v % , v/v % , w/w %) ppm	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a

					written report on the experiment
5	5	Understand the concepts of molarity, molality, normality, and percent concentration develop skills to adapt to advanced solution preparation techniques in professional or research settings	Normal solution , molar solution , dilution	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
6	5	Describe the components of a buffer Apply buffer solutions in laboratory experiments to maintain PH stability	Buffer solutions preparation and PH determination	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
7	5	Predict the PH of the resulting solution after a neutralization	Neutralization reaction (standardization of NaOH against standard HCL	Practical lecture	Evaluate the modus operandi and

		reaction follow proper safety protocols when handling acids and bases	Determination of acetic acid in vinegar Determination of a mixture of carbonate , bicarbonate		adherence to laboratory controls and readable results with a written report on the experimen t
8	5	Accurately prepare standard solutions of oxidizing and reducing agents Explore the role of redox titration in industries, including pharmaceuticals and food production	Redox titration Titration of KMNO4 solution against oxalic acid	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experimen t
9	5	Understand the concepts of solubility Explain the formation of precipitates and the conditions under which they occur Apply precipitation reactions to real-world contexts	Precipitation reaction , determination of halides Cl^- ion	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experimen

					t
10	5	Identify common separation and purification techniques apply these techniques to isolate target compounds from reaction mixture or natural sources	Separation and purification of organic compound Distillation , extraction crystallization , sublimation	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experimen t
11	5	Demonstrate the correct use of equipment for determining melting and boiling points interpret results to determine melting point ranges or boiling point plateaus	Determination of melting point Determination of boiling point	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experimen t
12	5	Perform common organic reactions in the laboratory analyze the reaction pathways and intermediates formed during multi-step	Reaction of some organic compounds (Aliphatic , aromatic alcohols phenols , aldehyde and ketone)	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and

		organic synthesis			readable results with a written report on the experiment
13	5	Recognize the importance of carboxylic acids in biological systems predict the reactivity and possible reactions of aliphatic and aromatic carboxylic acids, such as esterification, decarboxylation…	Aliphatic and aromatic carboxylic acid	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
14	5	Draw reaction schemes clearly and accurately, showing all intermediates, reagents and reaction conditions	Scheme for identification	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
15	5	Perform basic tests to identify the	Scheme for identification of solid organic	Practical lecture	Evaluate the modus

		functional groups in an organic compound	compound		operandi and adherence to laboratory controls and readable results with a written report on the experiment
16	5	The following tests are commonly used to identify and study the properties of carbohydrates, specifically monosaccharides, by targeting their chemical and functional groups.	Carbohydrates (monosacharides) Molish test Benedict , Barfoid test , Bile , Selfanof test , Osazon test	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
17	5	To determine the monosaccharides produced after hydrolysis, such as glucose and fructose from sucrose or glucose and galactose from lactose.	Disacharides (hydrolysis of disaccharides by acids)	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable

					results with a written report on the experiment
18	5	Demonstrate the conversion of polysaccharides (e.g., starch, cellulose, glycogen) into simpler sugars (monosaccharides or oligosaccharides) using acid-catalyzed hydrolysis.	Polysacharides Hydrolysis of polysaccharides by acids Hydrolysis of polysaccharides by saliva	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
19	5	Analyze how pH, temperature, and time impact the activity of salivary amylase and the efficiency of polysaccharide breakdown.	Polysacharides Hydrolysis of polysaccharides by acids Hydrolysis of polysaccharides by saliva	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment

20,21	10	To classify the unknown carbohydrate as a monosaccharide, disaccharide, or polysaccharide using preliminary tests	Scheme for identification of unknown carbohydrate sol	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
22	5	To accurately measure the concentration of glucose in an unknown solution by reacting it with a known volume of quantitative Benedict's reagent.	Quantitative estimation of glucose by quantitative Benedict sol	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
23	5	To detect the presence of peptide bonds (-CONH-) in proteins	Proteins Biuret test , Sakaguchi test , cysteine test Ninhydrin test , xantho protein test , Molish test	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable

					results with a written report on the experiment
24	5	To detect the presence of arginine, an amino acid containing a guanidino group	Proteins Biuret test , Sakaguchi test , cysteine test Ninhydrin test , xantho protein test , Molish test	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
25	5	To detect carbohydrates linked to glycoproteins or proteoglycans in protein samples.	Proteins Biuret test , Sakaguchi test , cysteine test Ninhydrin test , xantho protein test , Molish test	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable result with a written report on the experiment
26,27	10	To study the effect of temperature on protein stability	Precipitation of proteins (ionic strength PH , temp solvent)	Practical lecture	Evaluate the modus operandi

		and solubility, as excessive heat can denature proteins, leading to precipitation. Understand the structural stability of proteins.			and adherence to laboratory controls and readable results with a written report on the experiment
28,29	10	To identify unknown compounds in a mixture by comparing their Rf (retention factor) values with those of known standards.	Paper chromatography techniques	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on the experiment
30	5	To evaluate the purity of a compound by detecting impurities To analyze and detect drugs, metabolites, or disease markers in biological fluids like blood or urine.	Thin layer chromatography techniques	Practical lecture	Evaluate the modus operandi and adherence to laboratory controls and readable results with a written report on

					the experimen t

11. Course Evaluation

The student grades are distributed from 100 points to the full course and the student examines two university examinations.
The midterm exam is for 40 points and divided according to the following:
5 points of class participation and attendance
15 points Written Practical Examination
20 points Linear Theoretical Fruits
The Final is for for 60 points and divided according to the following:
25 points for practical exam
35 points for theoretical exam

12. Learning and Teaching Resources

Required textbooks(methodology, present)	
Main references (sources)	-Organic Chemistry - Jonathan Clayden, Nick Greeve Stuart Warren - Google Books .)n.d.). Retrieved July 20, 2022, from https://books.google.iq/books -Organic Chemistry (AS .(-Babylon university College of pharmacy practical biochemistry Prof. assist Dr. abdulhussien al-jebory and tamadhur salman
Recommended books and references (scientific journals, reports...)	-Global Publishing Houses -springer -Elsevier -pubmed
Electronic References, Websites	https://www.qmul.ac.uk/library/academic-skills/onlin study-resources/resource-guides-by-subject/chemistry/useful-websites/ Royal Society of Chemistry

1. Course Name: Computer Basics 1

2. Course Code: Computer Basics 1 (2024-2025)

3. Semester / Year: First semester / 2024-2025

4. Description Preparation Date: ١٥/1/2025

5. Available Attendance Forms: My presence in location at the university

6. Number of Credit Hours (Total) / Number of Units (Total): ٤٥hours (1 theoretical + 2 practical) / 2 units

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

Name: MS.C Wassim Talib Hatem
Email: wissam.talib@alayen.edu.iq

8. Course Objectives

- **Identify computer components**
- **Identify system software**
- **Identify external operating system commands**

9. Teaching and Learning Strategies

Strategy	- Interactive lectures - Practical review - Practical training - Lecture documentation

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Syllabus of The Theoretical Course					
1	(1 hour)	Learn about the basic components of computer	Learn about computer components	Visual, auditory and practical	total

2	(1 hour)	Learn about computer generations	Knowing compu generations	Visual, auditory and practical	total
3	(1 hour)	Understanding the concept of operating system	Operating system concept	Visual, auditory and practical	total
4	(1 hour)	Understanding System Software	System Software Familiarization	Visual, auditory and practical	total
5	(1 hour)	Understanding System Signals	System signal	Visual, auditory and practical	total
6	(1 hour)	Understanding the concept of drives	Disk drive	Visual, auditory and practical	total
7	(1 hour)	Understanding different operating systems	Operating systems	Visual, auditory and practical	total
8	(1 hour)	Getting to know MS-DOS	Getting to know MS-DOS	Visual, auditory and practical	total
9	(1 hour)	Learn about the computer's internal operating system commands	Learn about internal operating system commands	Visual, auditory and practical	total
10	(1 hour)	Understanding operating system commands (Dir, Del, Time)	Dir , Del , Time	Visual, auditory and practical	total
11	(1 hour)	Knowledge of operating system commands (Date, CIs, RD, CD, MD, Echo).	Date , CIs , RD , CD , MD , Echo	Visual, auditory and practical	total
12	(1 hour)	Use the commands (Ren, Copy, Vol, Ver, Path).	Ren , copy , vol , ver , path	Visual, auditory and practical	total
13	(1 hour)	Learn about external operating system commands	Learn about external operati system comman	Visual, auditory and practical	total

14	(1 hour)	Apply comman (Edit, Tree, Xcopy)	Edit , tree , xcopy	Visual, auditory and practical	total
15	(1 hour)	Use commands (Format, Chkdsk, Diskcopy).	format , chkdsk , diskcopy	Visual, auditory and practical	total
Syllabus of The Practical Course					
1	(2 hour)	Turn on, turn off and restart your computer	Display OS' basic on shutdown computer, log on, restart, sleep, using mouse (pointing, selecting, dragging and execution)	Visual, auditory and practical	total
2	(2 hour)	Use the desktop and navigate between applications	Using desktop, moving around the desktop and using the main application icons, using the start button, open, close and uninstall)	Visual, auditory and practical	total
3	(2 hour)	Control and Resize program windows	Looking at window details (title bar, tools bar, address bar status bar and windows's content), expand and collapse and close window, moving and resizing window	Visual, auditory and practical	total
4	(2 hour)	Working with files and folders using shortcuts	Working with drive, folders and files using the listed operation, using common shortcuts (Ctrl +C, +V,)	Visual, auditory and practical	total

5	(2 hour)	Identify hardware components using diagrams.	Identify the hardware and explain the different types of computer using illustrations or what provided by internet	Visual, auditory and practical	total
6	(2 hour)	Understanding processor chips, memory types, and units of measurement	Explain microprocessor chip, types of memory (RAM, ROM AND SSD Drive), memory units of measurements, storage devices, how to use keyboard, mouse, printers and other peripherals, identifying motherboard and their ports, how to use computer recourses	Visual, auditory and practical	total
7	(2 hour)	Getting to know the control panel and changing settings	Identifying the control panel icon, changing desktop icon, wallpaper, display type and size, setup time and date, using language options, using accessibility	Visual, auditory and practical	total
8	(2 hour)	Shutting down computer in different ways and creating user accounts	Power off comput using different options, understanding the mode of operation, create user account, log off, log in, changing g account	Visual, auditory and practical	total

9	(2 hour)	Understanding application software and software installation	Understanding the application software, type and their usage, how install and uninstall programs and display their differences from delete, update or reinstall the software	Visual, auditory and practical	total
10	(2 hour)	Clear junk files and deal with common system issues	Delete systematically unnecessary files, scan disk, understand the most common troubleshooting computer or software, copy files or disk, using antiviruses getting help for windows, getting online help	Visual, auditory and practical	total
11	(2 hour)	Understanding processor chips, memory types, and units of measurement	Part2	Visual, auditory and practical	total
12	(2 hour)	Start programs and learn about the main screen details	Starting a program when you add a screenshot of the data	Visual, auditory and practical	total
13	(2 hour)	Writing texts using different formats and correcting errors.	Writing test with wrong words and different formatting type perform the task of this lesson.	Visual, auditory and practical	total

14	(2 hour)	Format text, spacing, and change backgrounds.	Indent text by hanging the first line or hanging the main paragraph body, line space types, find and replace text	Visual, auditory and practical	total
15	(2 hour)	Insert page numbers, images, and tables.	Insert page number and \or images, clipart, excel sheet,	Visual, auditory and practical	total

11. Course Evaluation

60% theoretical and 40% practical (lab)

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Fundamentals of Computers
Recommended books and references (scientific journals, reports…)	Computer Fundamentals: Architecture and Organization
Electronic References, Websites	https://www.microsoft.com

Course name .1	
Human biology 1	
:Course cod .2	
Semester/year .3	
First semester-first stage	
The date this description was prepared .4	
2025/1/7	
Available attendance forms .5	
Live attendance	
Number of study hours (total)/number of units (total) .6	
Theoretical: 30 hours + Practical: 75 hours /4 units	
Name of the course administrator (if more than one name is mentioned) .7	
Name :D. Asmahan Munir Zinab Email: asmahanzinab@gmial.com	
Course objectives .8	
	1-Human biology is one of the basic sciences for students in medical colleges and relate and similar colleges (College of Medical and Health technologies).Biology studies many forms of life in different living organisms as well as their different relationships with th surrounding environment. 2-Biology gives a clear picture of living creature by knowing their structure and functio 3-The most important principles of biology are that all living organisms are composed cells, and all living organisms share a set of phenomena such as growth, reproduction, metabolism, development, and balance. 4-Biology focuses on analyzing the structure and functions of genes, enzymes and proteins, studying the microscopic structure of the cell and its contents, studying the mechanism of cellular differentiation, and studying molecular biology. 5- Biology focuses on the study of lower living organisms such as bacteria, viruses, prions, and their forms, and the diseases they cause to humans .
Teaching and learning strategies .9	
Strategy	-Effective discussion -Scientific thinking -Cooperative learning -Scientific report

Course structure .10

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	weeks
Details of the theoretical vocabulary of the subject					
oral tests-written quiz	theoretical	Definition of Biology, The Science of	- Study, knowledge and	2	1

		Biology, Importance of study Biology, Cell Theory, Some subdivision of Biology	clarification with examples		
oral tests-written quiz	theoretical	The Kingdom of living things, Classification of Organisms, Categories of Classification of Organisms, The five Kingdom Scheme of Classification	-Understanding, comparison and clarification with examples	2	2
oral tests-written quiz	theoretical	Cell Structure, Organelles and Functions, Physical Properties of Cells	Knowledge, discrimination and explanation with examples	2	3
oral tests-written quiz	theoretical	Cell Structure, Organelles and Functions, Physical Properties of Cells	Learning, and clarification with examples	2	4
oral tests-written quiz	theoretical	Cell Membrane, Structure, Functions, Endocytosis, Exocytosis	- remember , understand, and clarification with examples	2	5
oral tests-written quiz	theoretical	Chemical composition of Cells, Biochemistry of cell	- Knowledge ,comparison and clarification with examples	2	6
oral tests-written quiz	theoretical	Prokaryotes Cells, Eukaryotes Cells, Difference, Characteristics and Comparison	- Understanding ,discrimination, and clarification with examples	2	7
oral tests-written quiz	theoretical	The Characteristics of living things (Organisms), Evaluation, Adaptation, Respiration, Homeostasis, Metabolism, Anabolism, Catabolism, Respond to stimuli,	- Knowledge ,classification, and clarification with examples	2	8

		Reproduction			
oral tests-written quiz	theoretical	Cell Division (Mitosis)	- Study , understanding , and clarification with examples	2	9
oral tests-written quiz	theoretical	Cell Division (Meiosis)	- knowledge, remember ,and clarification with examples	2	10
oral tests-written quiz	theoretical	Inheritance, Genetic Concepts and Principles	- Understanding ,discrimination, and clarification with examples	2	11
oral tests-written quiz	theoretical	Gene Expression, Concepts, Mechanism of action	- Study, classification ,discrimination, and clarification with examples	2	12
oral tests-written quiz	theoretical	Organ Systems (Digestive ,Circulatory, Respiratory, Urinary, Muscularly, Nervous) Systems	- Classification ,understanding, and clarification with examples	2	13
oral tests-written quiz	theoretical	Viruses, Viriods, Prions, Bacteriophages, Viral life cycle, Characteristics, Shapes, Viral Human Diseases, Harmful of Viruses	- knowledge, learning, and clarification with examples	2	14
oral tests-written quiz	theoretical	Kingdom of Monera: Phylum Schizophyta (Bacteria), Classification, Structure, Morphology, Growth , Function, Motility	-Study, knowledge, and clarification with examples	2	15
Details of the practical vocabulary of the subject					
oral tests-written quiz	practical	The Microscope, Basic Microscope Techniques, Preparation of a Wat Mount	Understanding-report preparation	5	1
oral tests-	practical	Taxonomy, Study	cooperative	5	2

written quiz		some Principle of Classification of Organisms	work-report preparation		
oral tests-written quiz	practical	Study Cell Structure and Functions, Animal cells, Nucleus, Nucleolus, Chromatin, Endoplasmic Reticulum, Ribosome	Work skill-report preparation	5	3
oral tests-written quiz	practical	Cell Wall, Cell Membrane, Cytoplasmic Matrix, Lysosomes, Golgi apparatus, Cilia, Flagella, Study Fluid-mosaic model of Plasma Membrane, Types of Transports, Passive, Osmosis, with Examples	Understanding and knowledge - report preparation	5	4
oral tests-written quiz	practical			5	5
oral tests-written quiz	practical	Chemistry of life, Study Biology of Polymerase, Levels of organization, Lipids, Carbohydrates, Proteins, Amino acid	cooperative work-report preparation	5	6
oral tests-written quiz	practical	Study Characteristics of Prokaryotes Cells and Eukaryotes Cells, Difference and Comparison	Remember-report preparation	5	7
oral tests-written quiz	practical	Study Characteristics of living Organisms: Evaluation, Adaptation, Respiration, Homeostasis, Metabolism, Anabolism and Catabolism, Respond to stimuli, Reproduction	Study-report preparation	5	8
oral tests-written quiz	practical	Study Cell Mitosis, Nuclear Division, Cytoplasmic Division	cooperative work-report preparation	5	9

oral tests-written quiz	practical	Study Meiosis (Human Reproduction), Spermatogenesis, Oogenesis	Understanding-report preparation	5	10
oral tests-written quiz	practical	Gene and Gene Action, DNA, RNA Structures.	Work skill-cooperative work-report preparation	5	11
oral tests-written quiz	practical	Genetic Codes, Replication, Translation, Transcription, Mutation	Work skill-report preparation	5	12
oral tests-written quiz	practical	Study Organ Systems (Digestive, Circulatory, Respiratory, Urinary, Muscularly, Nervous) and Functions	Work skill-report preparation	5	13
oral tests-written quiz	practical	Study Viruses structure, Viriods, Prions, Bacteriophages, Viral Life Cycle, Characteristics, Shapes, Viral Human Diseases, Harmful of Viruses	Knowledge - cooperative work-report preparation	5	14
oral tests-written quiz	practical	Kingdom of Monera: Phylum Schizophyta (Bacteria), Classification Structure, Morphology, Growth , Function, Motility	Work skill-cooperative work-report preparation	5	15

Course evaluation .11

The monthly exam score is 40 marks: / 15 marks for practical and 20marks for theoretical, 5quiz marks
The final exam: 60 marks / 25 marks for practical and 35marks for theoretical

Learning and teaching resources .12

	Required textbooks (methodology, if present)
1-Prof. Gonsalves, 2-Biology 25: Human Biology 3-Los Angeles City College 4-Loosely Based on Mader's Human Biology,	Main references

7th edition.	
	Recommended supporting books and references (scientific journals, reports …)
	Electronic references, internet sites

1. Course Name:
Medical terminology
2. Course Code:
MTML 1102
3. Semester / Year:
First Semester/ First Year
4. Description Preparation Date:
15\1\2025
5. Available Attendance Forms: Attendance
6. Number of Credit Hours (Total) /
Number of Units (Total): 30 hours \ 2 Units
7. Course administrator's name (mention all, if more than one name)
Name: Asaad Abbas Jlood Email: asaad.jlood.@alayen.edu.iq
8. Course Objectives

Course Objectives	**1. Understand Medical Word Construction** • Recognize and define prefixes, suffixes, and root words commonly used in medical terms. • Analyze how medical terms are constructed and understand their meanings by breaking them into components. **2. Develop Medical Vocabulary** • Build a working vocabulary of terms used in anatomy, physiology, pathology, diagnostics, and treatment. • Learn terms associated with major body systems, diseases, and medical procedures. **3. Accurately Pronounce and Spell Terms** • Master the pronunciation and spelling of medical terms to ensure clear communication. • Practice phonetic guidelines for medical terminology. **4. Apply Terminology in Context** • Use medical terms appropriately in various healthcare scenarios, including documentation, charting, and patient communication. • Interpret and translate medical terms into layman's language for patient education. **5. Understand Body Systems and Medical Conditions** • Relate medical terminology to the structure and function of the

	human body. • Identify terms related to specific diseases, disorders, and medical conditions. **6. Utilize Medical Abbreviations and Symbols** • Recognize and correctly use common medical abbreviations, acronyms, and symbols. • Understand the context and limitations of using abbreviations in healthcare settings. **7. Interpret Medical Reports** • Read and understand medical documentation such as patient charts, physician orders, lab reports, and diagnostic results. • Extract relevant information using medical terminology. **8. Prepare for Healthcare Careers** • Lay the groundwork for advanced studies or careers in healthcare fields by understanding the language of medicine. • Gain confidence in using medical terminology in professional healthcare environments. **9. Foster Cultural Competency in Communication** • Understand the importance of clear and effective communication in diverse healthcare settings. • Learn to adapt terminology explanations for patients from various cultural and linguistic backgrounds.
9. Teaching and Learning Strategies	
Strategy	1. Understand Medical Word Construction Recognize and define prefixes, suffixes, and root words commonly used in medical terms. Analyze how medical terms are constructed and understand their meanings by breaking them into components. 2. Develop Medical Vocabulary Build a working vocabulary of terms used in anatomy, physiology, pathology, diagnostics, and treatment. Learn terms associated with major body systems, diseases, and medical procedures. 3. Accurately Pronounce and Spell Terms Master the pronunciation and spelling of medical terms to ensure clear communication. Practice phonetic guidelines for medical terminology. 4. Apply Terminology in Context Use medical terms appropriately in various healthcare scenarios, including documentation, charting, and patient communication. Interpret and translate medical terms into layman's language for patient

	education. 5. Understand Body Systems and Medical Conditions Relate medical terminology to the structure and function of the human body. Identify terms related to specific diseases, disorders, and medical conditions. 6. Utilize Medical Abbreviations and Symbols Recognize and correctly use common medical abbreviations, acronyms, and symbols. Understand the context and limitations of using abbreviations in healthcare settings. 7. Interpret Medical Reports Read and understand medical documentation such as patient charts, physician orders, lab reports, and diagnostic results. Extract relevant information using medical terminology. 8. Prepare for Healthcare Careers Lay the groundwork for advanced studies or careers in healthcare fields by understanding the language of medicine. Gain confidence in using medical terminology in professional healthcare environments. 9. Foster Cultural Competency in Communication Understand the importance of clear and effective communication in diverse healthcare settings. Learn to adapt terminology explanations for patients from various cultural and linguistic backgrounds. Would you like these tailored for a specific audience or adjusted in depth? -Creating a strategy for teaching or learning medical terminology effectively involves clear planning, engaging resources, and practical application. Below is a comprehensive strategy for teaching or learning medical terminology: 1. Establish a Strong Foundation Teach Word Parts First: Focus on prefixes, suffixes, root words, and combining forms. This helps students understand and decode unfamiliar terms. Start Simple: Begin with common terms and build complexity over time. Use Mnemonics and Memory Aids: Create associations and acronyms to help recall difficult terms. 2. Organize by Body Systems Divide the Curriculum by Systems: Teach terms related to specific systems (e.g., cardiovascular, respiratory, nervous). Relate Terms to Function: Connect terms to their anatomical and physiological contexts to make them meaningful. 3. Promote Active Learning Interactive Activities: Use flashcards, matching games, and quizzes to reinforce learning. Case Studies: Present real-life medical cases where students can apply terminology in context. Peer Learning: Encourage group activities, like collaborative diagram

	labeling or word-building exercises. 4. Use Multimedia Resources Videos and Animations: Visual tools that show processes like surgeries or organ functions enhance understanding. Apps and Software: Leverage medical terminology apps that provide drills, flashcards, and interactive content. Auditory Tools: Include recordings to teach correct pronunciation. 5. Encourage Practical Application Medical Documentation Practice: Provide mock patient charts, lab reports, and prescriptions for interpretation. Role-Playing Scenarios: Simulate interactions where students use medical terms in patient communication. Written Exercises: Have students write sentences or paragraphs using specific terms. 6. Reinforce Through Repetition Daily Practice: Encourage consistent, short study sessions rather than cramming. Cumulative Quizzes: Regularly review previously learned material alongside new content. Repetition in Different Formats: Use reading, writing, speaking, and listening to reinforce terms. 7. Integrate Real-World Examples Current Medical News: Discuss terms found in news articles or medical research. Field Trips: Visit medical facilities or invite guest speakers to discuss real-world applications of terminology. Simulations: Use anatomy models or virtual dissection tools to associate terms with physical structures. 8. Focus on Communication Skills Layman Translation: Teach students how to explain medical terms in plain language for patient communication. Avoid Overreliance on Abbreviations: Emphasize clarity and accuracy in professional settings. 9. Assess Understanding Regularly Formative Assessments: Use regular quizzes, flashcards, and oral tests to track progress. Summative Assessments: Administer comprehensive exams covering multiple body systems or medical fields.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Syllabus of The Theoretical Course					
1	2	Understanding the basics of medical	Introduction, defining medical terminology, techniques of	• Use videos to explain complex medical concepts and procedures.	Discussion and Quiz

		terminology. Learning the foundation of building medical terms. Identifying the roots of words, prefixes, and suffixes in medical terms.	medical word building, elements of medical word, word root, suffixes, prefixes	• Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	
2	2	Studying common prefixes in medical terminology. Understanding the construction of medical terms. Explaining the basic structure of the body, starting from the cell, tissue, and organs.	Common prefixes, common suffixes, body structure key terms ,level of organization: cell, tissue,organ, system	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
3	2	Studying diseases and pathological conditions. Understanding abnormal conditions such as injuries, inflammations, and diseases.	Pathology and abnormal condition: tumors, infection and inflammation , symptoms, disease, and diagnosis	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
4	2	Studying	Integumentary	• Use videos to	Discussion

		medical terms specific to the skin. Understanding terminology for various skin diseases and conditions.	(skin) system	explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	and Quiz
5	2	Studying medical terms specific to the muscular system. Understanding terminology related to the skeletal system.	Musculoskeletal system	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
6	2	Studying medical terms specific to the digestive system. Understanding terminology related to the vascular system.	Digestive system and Cardiovascular system	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key	Discussion and Quiz

				medical terminology, processes, and systems.	
7	2	Studying medical terms specific to blood. Understanding terminology related to the lymphatic system.	Blood, lymph and immune system	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
8	2	Studying medical terms specific to the respiratory system. Understanding terminology related to respiratory diseases and conditions.	Respiratory system	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
9	2	Studying medical terms specific to the nervous system. Understanding terminology related to neurological diseases and	Nervous system and Special senses	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes.	Discussion and Quiz

		conditions.		• Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	
10	2	Studying medical terms specific to the endocrine system. Understanding terminology related to different types of glands.	Endocrine system	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
11	2	Studying medical terms specific to the urinary system. Understanding terminology related to the reproductive system.	Urinary system and Reproductive system	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
12	2	Studying medical terms specific to pregnancy and childbirth.	Gynecology, pregnancy, embryology and childbirth	• Use videos to explain complex medical concepts and procedures. • Incorporate images and	Discussion and Quiz

		Understanding terminology related to gynecological diseases and conditions. Learning terms related to fetal development and childhood.		diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	
13	2	Studying medical terms specific to physical and psychological growth. Understanding terminology related to developmental stages and processes.	Childhood, growth and development	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
14	2	- Studying medical terms used in writing medical reports. - Understanding terminology related to diagnosing diseases and conditions.	Medical record activity and writing a diagnostic report	• Use videos to explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	Discussion and Quiz
15	2	-Go over and	Revision	• Use videos to	Discussion

		reinforce the key medical terms and concepts learned. - Focus on definitions, word construction, and application in various body systems and diseases. - Ensure comprehension of prefixes, suffixes, roots, and combining forms. - Review terminology related to diagnosis, medical reports, and specialized fields such as dermatology, neurology, and gynecology. -Practice interpreting and constructing medical terms through exercises and case studies.		explain complex medical concepts and procedures. • Incorporate images and diagrams to visually represent anatomy, medical conditions, and processes. • Create PowerPoint presentations to organize and highlight key medical terminology, processes, and systems.	and Quiz

11.Course Evaluation

Monthly exam : 30 marks
Final exam : 70 marks

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Nath, Judi Lindsley; Lindsley, Kelsey P. A Short Course in Medical Terminology. Wolters Kluwer Health, 2018.
Main references (sources)	Nath, Judi Lindsley; Lindsley, Kelsey P. A Short Course in Medical Terminology. Wolters Kluwer Health, 2018.
Recommended books and references (scientific journals, reports...)	Medical Terminology An illustrated guid
Electronic References, Websites	

Academic Description of Arabic Language

1. Course Title: Arabic Language
2. Course Code:
3. Semester / Year: Second Semester / First Year
4. Date of preparation of this description: 27-1-2025
5. Available forms of attendance: In the classroom
6. Number of Credit Hours (Total) / Number of Units (Total): 15 Credit Hours / 2
7. Course Administrator's Name (if more than one name): M.M. Ayat Talib Abdul sada
8. Course Objectives

1. Language objectives Providing the learner with the basic skills of the language listening, speaking, reading and writing 2. Educational and educational goals Accustom the student to self-learning and researc different linguistic sources 3. Cultural and civilizational goals Introducing the learner to the heritage of the Ara language and literature and promoting a deep understanding of religious texts such as Holy Quran and the Prophet's hadith	**Course Objectives**

9. Teaching and Learning Strategies

It aims to improve the skills of expression and communication, the ability to express orally and written clearly and smoothly, the ability to discuss and analyze ideas in the development of critical thinking and the ability to persuade.	Strategy

10. Course Structure

Evaluation method	Learning method	Unit or subject name	Required Learning Outcomes	Hours	Week
Question & Answer	theoretic al	Introduction to linguistic errors - taa tied - long and open taa	Understanding the lecture	1	First
Question & Answer	theoretic	Rules for writing elongated and compartment windings – solar and	Understanding	1	Second

	al	lunar letters	the lecture		
Question & Answer	theoretical	Al-Daad and Al-Zaa	Understanding the lecture	1	Third
Question & Answer	theoretical	Hamza writing	Understanding the lecture	1	Fourth
Question & Answer	theoretical	Punctuation	Understanding the lecture	1	V
Question & Answer	theoretical	noun and verb and differentiate between them	Understanding the lecture	1	Sixth
Question & Answer	theoretical	Effects	Understanding the lecture	1	Seventh
		Midterm Exam			Eighth
Question & Answer	theoretical	Number	Understanding the lecture	1	Ninth
Question & Answer	theoretical	Applications of common linguistic errors	Understanding the lecture	1	X
Question & Answer	theoretical	Formal aspects of administrative discourse	Understanding the lecture	1	atheisten
Question & Answer	theoretical	The language of administrative discourse	Understanding the lecture	1	Second ten
Question & Answer	theoretical	The language of administrative discourse	Understanding the lecture	1	Third ten
Question & Answer	theoretical	Samples of administrative correspondence	Understanding the lecture	1	Fourth ten
Question & Answer	theoretical	Noon and Tanween meanings of prepositions	Understanding the lecture	1	Fifteenth

11. Course Evaluation

The grade is distributed out of 100 according to the tasks assigned to the student such as daily preparation, daily, oral, monthly, written exams, reports ...etc
Daily exams : 20%
Semester exams: 70%
Reporting: 10%

12. Learning and Teaching Resources

	Required textbooks (methodology , if any)
Religious sources Quran. It is the first source of the Aral language, as it is considered the high linguistic and literary reference	Key references (sources)
Arabic dictionaries. Lisan al-Arab by Ibn Manzur. And the surrounding dictionary of Fayrouzabadi **Grammar and morphology books. The book by Sibawayh and the millennium and Ibn Aqil's explanation by Ibn Malik**	Recommended supporting books and references (scientific journals, reports...)

	Electronic References, Websites