

1. Course Name:					
laboratory instrument 2					
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					
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 in 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	Microbial safety cabinet, type of cabinet Safety principle and uses	In presence	Evaluate the lecture and conduct Quiz
2	2	The student explain the topic	pipets	In presence	Evaluate lecture and conduct Quiz
3	2	The student identify the topic	Water bath	In presence	Evaluate lecture and conduct Quiz
4	2	The student classify the	Sealer, Principle and Uses, Care and Safety	In presence	Evaluate lecture and conduct

		topic			Quiz
5	2	The student classify the topic	Sealer, Principle and Uses, Care and Safety	In presence	Evaluate lecture and conduct Quiz
6	2	The student describe the topic	polymerase chain reaction machine	In presence	Evaluate lecture and conduct Quiz
7	2	The student explain the topic	supplementary	In presence	Evaluate lecture and conduct Quiz
8	2	The student understands the topic	DNA sequencer	In presence	Evaluate lecture and conduct Quiz
9	2	The student explain the topic	supplementary	In presence	Evaluate lecture and conduct Quiz
10	2	The student discuss the topic	UV spectrometer	In presence	Evaluate lecture and conduct Quiz
11	2	The student report the topic	supplementary	In presence	Evaluate lecture and conduct Quiz
12	2	The student recognize the topic	Tissue section preparation devices	In presence	Evaluate lecture and conduct Quiz
13	2	The student discuss the topic	supplementary	In presence	Evaluate lecture and conduct Quiz
14	2	The student explain the topic	General review	In presence	Evaluate lecture and conduct Quiz
15			Final exam		
Syllabus of The Practical Course					
1	4	Introducing the student to the incubator and how	Microbiological safety incubator	In presence	Evaluate the lecture and conduct Quiz

		to use it			
2	4	Introducing the student to the incubator and how to use it	Incubator	In presence	Evaluate the lecture and conduct Quiz
3	4	Introducing the student to the pipettes and how to use them	Pipettes	In presence	Evaluate the lecture and conduct Quiz
4	4	Introducing the student to the water bath and how to use it	Water bath	In presence	Evaluate the lecture and conduct Quiz
5	4	Introducing the student to the autoclave and how to use it	Autoclave	In presence	Evaluate the lecture and conduct Quiz
6	4	Work skills	Autoclave	In presence	Evaluate the lecture and conduct Quiz
7	4	Introducing the student to the PCR device	General introduction to PCR	In presence	Evaluate the lecture and conduct Quiz
8	4	Learning the student how to use it	General introduction to PCR	In presence	Evaluate the lecture and conduct Quiz
9	4	Work skills and cooperative work	General introduction to PCR	In presence	Evaluate the lecture and conduct Quiz
10	4	Introducing the student to the Balance device	Balance	In presence	Evaluate the lecture and conduct Quiz
11	4	Learning the student how to use it	Balance	In presence	Evaluate the lecture and conduct Quiz
12	4	Introducing the student to the Balance device and how to use it	Sensitive balance	In presence	Evaluate the lecture and conduct Quiz
13	4	Introducing the student to the Microtome device	Microtome	In presence	Evaluate the lecture and conduct Quiz

14	4	Learning the student how to use it	Microtome	In presence	Evaluate the lecture and conduct Quiz
15	4	Work skills	Microtome	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. "Biocompatibility: Assessment of Medical Devices and Materials. " Biocompatibility Assessment of Medical Devices and Materials, by Julian H. Braybrook (Editor), ISBN 0-471-96597-1, 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. Fiori, D.C. Joy, E. Lifshin and Klaus-Ruediger Petermann, 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: Krey 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

Course name .1					
Human biology2					
:Course cod .2					
Semester/year .3					
Second 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					
The second section of human biology deals with the types of creatures by analyzing the partial foundations of evolutions of chemical environment of specific proteins such as hemoglobin and enzymes and hormones). It also focuses on the study of lower organisms such as bacteria, viruses, and parasites, fungi and others, focusing on the existence of these organisms and their medical importance.					
Teaching and learning strategies .9					
-Effective discussion -Scientific thinking -Cooperative learning -Scientific report					Strategy
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	Harmful Activity of Bacteria, (Bacterial Diseases in Human and Animals, Control of bacteria	- Study, knowledge and clarification with examples	2	1
oral tests-written quiz	theoretical	Kingdom of Protista ,Simple Algae, Harmful of Algae	-Understanding, comparison and clarification with examples	2	2
oral tests-	theoretical	Kingdom of Protista,	Knowledge,	2	3

written quiz		Protozoans, Classification of Protozoa	discrimination and explanation with examples		
oral tests-written quiz	theoretical	Phylum of Sarcodina, Amoebae's, Phylum of Zoomastigina, Trypanosome, Giardia	Learning, and clarification with examples	2	4
oral tests-written quiz	theoretical	Phylum of Sporozoa, Plasmodium	- remember , understand, and clarification with examples	2	5
oral tests-written quiz	theoretical	Kingdom of Fungi, Classification, Reproduction	- Knowledge ,comparison and clarification with examples	2	6
oral tests-written quiz	theoretical	Harmful Activities of Fungi	- Understanding ,discrimination, and clarification with examples	2	7
oral tests-written quiz	theoretical	Yeast and Yeast like Fungi, Characteristic and Classification, Candida	- Knowledge ,classification, and clarification with examples	2	8
oral tests-written quiz	theoretical	Kingdom of Animals, Classification, Invertebrates and Vertebrates, Importance to Human Diseases	- Study , understanding , and clarification with examples	2	9
oral tests-written quiz	theoretical	Human Bodies, Protection, Support and Locomotion	- knowledge, remember ,and clarification with examples	2	10
oral tests-written quiz	theoretical	Human Body Defense (Immunity, Antigen, Antibody), Hormones, Enzymes	- Understanding ,discrimination, and clarification with examples	2	11
oral tests-written quiz	theoretical	Helminths, Characteristics and Classification.	- Study, classification ,discrimination, and clarification with examples	2	12
oral tests-written quiz	theoretical	Flat Worms, Round Worms,	- Classification ,understanding,	2	13

		Classification, Harm full Activities to Human	and clarification with examples		
oral tests-written quiz	theoretical	Management of industrial, agricultural and medical waste	- knowledge, learning, and clarification with examples	2	14
oral tests-written quiz	theoretical	Scientific Methods , Steps and Examples of Scientific Methods	-Study, knowledge, and clarification with examples	2	15
Details of the practical vocabulary of the subject					
oral tests-written quiz	practical	Harmful Activity of Bacteria, (Bacterial Diseases in Human and Animals, Control of bacteria	Understanding-report preparation	5	1
oral tests-written quiz	practical	Kingdom of Protista ,Simple Algae, Harmful of Algae	cooperative work-report preparation	5	2
oral tests-written quiz	practical	Kingdom of Protista, Protozoans, Classification of Protozoa	Work skill-report preparation	5	3
oral tests-written quiz	practical	Phylum of Sarcodina, Amoebae's, Phylum of Zoomastigina, Trypanosome, Giardia	Understanding and knowledge - report preparation	5	4
oral tests-written quiz	practical	Phylum of Sporozoa, Plasmodium		5	5
oral tests-written quiz	practical	Kingdom of Fungi, Classification ,Reproduction	cooperative work-report preparation	5	6
oral tests-written quiz	practical	Harmful Activities of Fungi	Remember-report preparation	5	7
oral tests-written quiz	practical	Yeast and Yeast like Fungi, Characteristic and Classification ,Candida	Study-report preparation	5	8
oral tests-written quiz	practical	Kingdom of Animals, Classification, Invertebrates and Vertebrates, Importance to	cooperative work-report preparation	5	9

		Human Diseases			
oral tests- written quiz	practical	Human Bodies, Protection, Support and Locomotion	Understanding- report preparation	5	10
oral tests- written quiz	practical	Human Body Defense (Immunity, Antigen, Antibody), Hormones, Enzymes	Work skill- cooperative work-report preparation	5	11
oral tests- written quiz	practical	Helminths, Characteristics and Classification	Work skill- report preparation	5	12
oral tests- written quiz	practical	Flat Worms, Round Worms, Classification, Harm full Activities to Human.	Work skill- report preparation	5	13
oral tests- written quiz	practical	Study Management of industrial, agricultural and medical waste, Referring to global Experiences	Knowledge - cooperative work-report preparation	5	14
oral tests- written quiz	practical	Scientific Methods , Steps and Examples of Scientific Methods	Work skill- cooperative work-report preparation	5	15

Course evaluation .11

The monthly exam score is 15 marks, the theoretical score is 20 marks ,
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, 7th edition.	Main references
	Recommended supporting books and references (scientific journals, reports ...)
	Electronic references, internet sites

1. Course Name:					
anatomy					
2. Course Code:					
3. Semester / Year:					
second semester / First stage					
4. Description Preparation Date:					
24-3-2025					
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: Associated professor Bassel Adel Ismail Email: bassel.adel@alayen .edu.iq Msc. Hind abbas Mechaan Hind.abbas@alayen.edu.iq					
8. Course Objectives					
At the end of the year, the student is generally trained and qualified to know the parts of the human body and ready to understand the courses in subsequent years					
General understanding of the functions of the body organs while linking them to the tests used in medical laboratory technologies					
9. Teaching and Learning Strategies					
Strategy		1. Use modern educational models in teaching Allocation of grade percentage for activity and participation 3. Administer the lecture in such a way that the student feels the importance of course and associate it with his specialization.			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Syllabus of The Theoretical Course					
1	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	General Anatomy :Introduction to anatomy and human body, level of organization ,anatomical position ,body regions and cavities ,body planes and sections ,directional terms	Attendance • Lectu (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly a reporting examinations Scientific Discussio
2	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Tissues and membranes	Attendance • Lectu (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly a reporting examinations Scientific Discussions
3	2	A1/A2/A4	Body regions Upper	Attendance • Lectu	Weekly, monthly a

		B1/B2/B3/B4 C 1/C 2/C 3/C 4	limb ,lower limb ,thorax	(interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	reporting examinations Scientific Discussions
4	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Abdomen ,pelvis ,h and neck	Attendance • Lectu (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly a reporting examinations Scientific Discussions
5	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Body systems :Musculoskeletal system: Bones ,join and muscles	Attendance • Lectu (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly a reporting examinations Scientific Discussions
6	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Digestive system: Digestive tract ,Accessories and glands	Attendance • Lectu (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly a reporting examinations Scientific Discussions
7	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Cardiovascular system: heart , bloo vessels.	Attendance • Lectu (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly a reporting examinations Scientific Discussions
8	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Lymphatic system.	Attendance • Lectu (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion,	Weekly, monthly a reporting examinations Scientific Discussions

				brainstorming and practical discussion	
9	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Respiratory system	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
10	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Nervous system: central nervous system, peripheral nervous system	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
11	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Endocrine system	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
12	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Special senses	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
13	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Urinary system	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
14	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Reproductive system	Attendance • Lecture (interactive) Online lectures (interactive)	Weekly, monthly and reporting examinations Scientific Discussions

				Use strategy, collaborative learning, discussion, brainstorming and practical discussion	
15	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Gynecology pregnancy , childbirth , Embryology Childhood, growth and development	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
Syllabus of The Practical Course					
1	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	General Anatomy :Introduction to anatomy and human body, level of organization ,anatomical position ,body regions and cavities ,body planes and sections ,directional terms	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
2	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Tissues membranes	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
3	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Body regions Upper limb ,lower limb ,thorax	Attendance • Lecture (interactive) Online lectures (interactive) Use strategy, collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussions
4	2	A1/A2/A4	Abdomen ,pelvis ,h	Attendance • Lecture	Weekly, monthly and

		B1/B2/B3/B4 C 1/C 2/C 3/C 4	and neck	(interactive) Online lectures (interactive) Use strate collaborativ learning, discussion, brainstormi and pract discussion	reporting examinations Scientific Discussio
5	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Body system: :Musculoskeletal system: Bones ,joi and muscles	Attendance • Lectu (interactive) Online lectures (interactive) Use strate collaborativ learning, discussion, brainstormi and pract discussion	Weekly, monthly a reporting examinations Scientific Discussio
6	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Digestive system Digestive t ,Accessories glands	Attendance • Lectu (interactive) Online lectures (interactive) Use strate collaborativ learning, discussion, brainstormi and pract discussion	Weekly, monthly a reporting examinations Scientific Discussio
7	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Cardiovascular system: heart , blo vessels.	Attendance • Lectu (interactive) Online lectures (interactive) Use strate collaborativ learning, discussion, brainstormi and pract discussion	Weekly, monthly a reporting examinations Scientific Discussio
8	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Lymphatic system.	Attendance • Lectu (interactive) Online lectures (interactive) Use strate collaborativ learning, discussion,	Weekly, monthly a reporting examinations Scientific Discussio

				brainstorming and practical discussion	
9	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Respiratory system	Attendance • Lectures (interactive) Online lectures (interactive) Use strategies: collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussion
10	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Nervous system: central nervous system, peripheral nervous system	Attendance • Lectures (interactive) Online lectures (interactive) Use strategies: collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussion
11	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Endocrine system .	Attendance • Lectures (interactive) Online lectures (interactive) Use strategies: collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussion
12	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Special senses	Attendance • Lectures (interactive) Online lectures (interactive) Use strategies: collaborative learning, discussion, brainstorming and practical discussion	Weekly, monthly and reporting examinations Scientific Discussion
13	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Urinary system	Attendance • Lectures (interactive) Online lectures (interactive)	Weekly, monthly and reporting examinations Scientific Discussion

				Use strate collaborativ learning, discussion, brainstormi and pract discussion	
14	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Reproductive system	Attendance • Lectu (interactive) Online lectures (interactive) Use strate collaborativ learning, discussion, brainstormi and pract discussion	Weekly, monthly a reporting examinations Scientific Discussio
15	2	A1/A2/A4 B1/B2/B3/B4 C 1/C 2/C 3/C 4	Gynecology pregnancy , childbirth , Embryology Childhood, growth development	Attendance • Lectu (interactive) Online lectures (interactive) Use strate collaborativ learning, discussion, brainstormi and pract discussion	Weekly, monthly a reporting examinations Scientific Discussio

11. Course Evaluation

The grade of 100 is distributed according to the student's mandated tasks such as daily preparation, daily, oral, monthly and final examinations: according to the following order
40 degrees midterm exam distributed to 20 degrees theoretical, 15 degrees practical and 5 degrees for participation, attendance and non-class activities
60 degrees final exam distributed to 25 degrees for practical and 35 degrees for theory

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (sources)	Grant's Atlas of Anatomy, 12th Edition Agur, Anne M.R.; Dalley, Arthur F.
Recommended books and references (scientific journals, reports...)	Elsevier, Sciencedirect springer link, Pdfdrive
Electronic References, Websites	www.who.int

1. Course Name: Computer Basics 2

2. Course Code: Computer Basics 2 (2024–2025)

3. Semester / Year: Second 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):
45 hours (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

Course Objectives

- Introducing students to basic computer concepts
- Developing students' skills in using Microsoft Office programs
- Developing technical skills to deal with the Internet and networks

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
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Syllabus of The Theoretical Course

1	1 hour	Understanding the basic fundamentals of Excel	Microsoft Excel: understanding basic terminology (work sheet, work file, cell, cell pointer cell content, row, and column reference), building formula, mathematical operators, hierarchy of the main mathematical operations, managing workbooks (create new one, create from template, enter data, moving around, saving, opening, closing workbooks)	Visual, auditory and practical	total
2	1 hour	Students will be able to create new files, use templates, enter data, save, open, and close.	Manipulating the contents (selecting cells, column, row, worksheet, using undo and redo, copying, moving data, changing column width and row height), auto filling technique, deleting and editing content, delete and insert row or column, formatting cell(number, font, alignment, border, color and shading, projection of cells	Visual, auditory and practical	total
3	1 hour	Ability to edit content and manage worksheet	Creating simple and complex formula using different types of writing, using absolute and relative address, understanding common error values, using common built-in functions (sum, average, max, min, count)	Visual, auditory and practical	total

4	1 hour	Applying formatting and cell formatting technique	copying, formulas . Insert and deleting worksheets, formatting tables using auto format	Visual, auditory and practical	total
5	1 hour	Using simple and complex formulas in Excel	Working with charts (create chart, select chart elements, changing chart types, positioning and resizing charts, charts and axis titles, changing background and color effects, changing data series color, adding or removing legend and data labels and data	Visual, auditory and practical	total
6	1 hour	Understanding the principles of presentations using PowerPoint	Understanding PowerPoint & presentation, what does a presentation include: working with presentations (creating, saving, closing, opening presentations), moving around in the presentation, managing the slide , changing layout, changing or modifying themes	Visual, auditory and practical	total
7	1 hour	Manage slide objects in PowerPoint	Managing slide objects (using select versus edit mode, manipulating text, create, tables and chart, inserting pictures or clip art or multimedia), creating a master slide, animating objects (customizing the animation applying slide translations), running the slide show and set up the presentation	Visual, auditory and practical	total

8	1 hour	Understanding Internet technologies and networking principles	The internet , browsers, and the World wide web (The internet, the World wide web, web browsers), understanding web site address (web site protocols resource name)	Visual, auditory and practical	total
9	1 hour	Understanding LAN and WAN principles:	common web site/ page element, browser features and functions (browser functions, browsers features), getting connected, defining network, advantages of using networks, understanding local area network (LAN) and wide area network (WAN), connected to the internet (dial- up connection), domain and sub domain, needs for security and firewalls	Visual, auditory and practical	total
10	1 hour	Understanding modern digital communication and its tools	Digital communication : how can I communicate with others? (electronic mail, install, message , text message, VoIP, video conferencing, chat rooms, social networking site, blogs, presence, and standards for electronic communication).	Visual, auditory and practical	total
11	1 hour	Using Email and Managing Electronic Communications	Working with Email (username, password, and credentials)	Visual, auditory and practical	total
12	1 hour	Students will be able to create and manage email accounts and send emails with attachments.	Using Microsoft Outlook (creating new messages, receiving messages, working	Visual, auditory and practical	total

			with attachments managing spam, empty		
13	1 hour	Learn about data protection and cybersecurity standards:	Digital citizenship: identifying ethical issues (understanding intellectual property, copyrights and licensing), protecting your data or computer (identifying software threats, understanding viruses), protecting yourself while online, buying online, how much information should I share? Protecting your privacy	Visual, auditory and practical	total
14	1 hour	Searching for information using search engine techniques	Finding information: searching for information (different types of Web sites, searching a specific Web sites), using search engine technology (understanding how search engines work)	Visual, auditory and practical	total
15	1 hour	Use search engines effectively to find accurate information and evaluate the credibility and reliability of information on the Internet.	Narrowing the search, evaluating the information (reliability and relevance, validity and authenticity, objectivity and Bias)	Visual, auditory and practical	total

Syllabus of The Practical Course

1	2 hour	Dealing with the basics of creating Excel files	Work with the principles of workbook and worksheet and their contents, working with mathematical operators, create worksheet, using template, show the different types of data,	Visual, auditory and practical	total
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			save work, closing workbook or closing programs, moving around the main excel window		
2	2 hour	Organizing the contents of worksheets	Changing content, auto fill data manipulating worksheet and data, using the different option of formatting cell	Visual, auditory and practical	total
3	2 hour	Writing Mathematical Formulas and Handling Errors in Excel	Writing different formulas, copy from understand the differences between absolute and relative cell, identify error values	Visual, auditory and practical	total
4	2 hour	Using built-in functions in Excel	use common built-in functions, customizing tables, managing	Visual, auditory and practical	total
5	2 hour	Manage print and preview in Excel	Built different types of chart, customizing their objects, built database tables or chart, changing print options	Visual, auditory and practical	total
6	2 hour	Manage print and preview in Excel	Create presentations, create using template, insert slide, change slide layout, save work.	Visual, auditory and practical	total
7	2 hour	Create presentations using PowerPoint	Open previous work, insert image, clipart, worksheet, sound, video as you need , put transition time within slide and transition between slide, run slide show	Visual, auditory and practical	total
8	2 hour	Format slides and apply transitions in PowerPoint	Exercise of checking connection of your computer system to the internet, and use a simple utility (ping request) to test whether your internet connection is	Visual, auditory and practical	total

			functioning or not, open web sites of different domains (.net, .org, .com, .edu)		
9	2 hour	Insert multimedia and graphics into PowerPoint	Open different web browsers (internet explorer, Firefox, chrome and others explain their function (addressing, uploading and downloading, and searching) and features (back, forward, and refresh buttons, home page, Tabs, favorites\bookmarks, checking the history, plug-ins\add- ons), connect to the internet, identifying networks and their types	Visual, auditory and practical	total
10	2 hour	Preparing presentations f playback and printing	Exercise of creating E-mail (google mail, yahoo mail), social network account (facebook and tweeter) blogs, and others, sending text message using facebook message, skype and other activities in social network (status, privacy and security)	Visual, auditory and practical	total
11	2 hour	Connect to the Internet and check the stability of the connection.	Explore E-mail properties: security (password, password recovery information, and alternative e-mail) sending e-mail (To, CC, BCC, and subject), attaching file to e-mail, building contacts list and others	Visual, auditory and practical	total
12	2 hour	Explore different browse and their functions.	Sending Email using outlook (with exploring all properties above)	Visual, auditory and practical	total

13	2 hour	Create and manage email accounts	Try to make password, try to remove files without recoverable ability (ex: flickr.com, youtube.com)	Visual, auditory and practical	total
14	2 hour	Interact with social networks and blogs	Try web search for certain key words using different search engine (ex. Google bing)	Visual, auditory and practical	total
15	2 hour	Advanced Internet Search	Find specific and accurate information using google (reduce no. of keywords, use quotation marks, use OR, search within certain site, and others)	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)	Introduction to Computers" by Peter Norton
Main references (sources)	"Excel 2019 Bible" by Michael Alexander, Richard Kusleika, and John Walkenbach
Recommended books and references (scientific journals, reports...)	"IEEE Computer Society Digital Library"
Electronic References, Websites	www.microsoft.com www.khanacademy.org www.w3schools.com www.coursera.org

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 research different linguistic sources 3. Cultural and civilizational goals Introducing the learner to the heritage of the Arabic 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	theoretic al	Al-Daad and Al-Zaa	Understanding the lecture	1	Third
Question & Answer	theoretic al	Hamza writing	Understanding the lecture	1	Fourth
Question & Answer	theoretic al	Punctuation	Understanding the lecture	1	V
Question & Answer	theoretic al	noun and verb and differentiate between them	Understanding the lecture	1	Sixth
Question & Answer	theoretic al	Effects	Understanding the lecture	1	Sevent h
		Midterm Exam			Eighth
Question & Answer	theoretic al	Number	Understanding the lecture	1	Ninth
Question & Answer	theoretic al	Applications of common linguistic errors	Understanding the lecture	1	X
Question & Answer	theoretic al	Formal aspects of administrative discourse	Understanding the lecture	1	atheist ten
Question & Answer	theoretic al	The language of administrative discourse	Understanding the lecture	1	Secon d ten
Question & Answer	theoretic al	The language of administrative discourse	Understanding the lecture	1	Third ten
Question & Answer	theoretic al	Samples of administrative correspondence	Understanding the lecture	1	Fourth ten
Question & Answer	theoretic al	Noon and Tanween meanings of prepositions	Understanding the lecture	1	Fifteen th

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 Arabic language, as it is considered the highest 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...)

