Academic Program Description Form

University Name: Al–Furat Al–Awsat Technical University Faculty/Institute: Babylon Technical Institute Scientific Department: Department of Pharmacy Technologies Academic or Professional Program Name: Department of Pharmacy Technologies

Final Certificate Name: Technical diploma in pharmacy technology Academic System: Semester Description Preparation Date: 2024/2/10 File Completion Date: 2024/3/9

Signature: Head of Department Name: Mr. Dr. HassanAdheem Abbas

Signature:

Scientific Associate Name: Pro Dr. Oras Khudhayer obayes Date:

Date:

The file is checked by: Department of Quality Assurance and University Performance Director of the Quality Assurance and University Performance Department: Khansaa Azeez Obayes

Date: Signature:

Plobroval

Approval of the Dean

1. Program Vision

The Pharmacy Technology Department seeks to remain distinguished in preparing a distinguished cadre to work in health institutions, develop health care, scientific research, leadership and excellence in pharmaceutical education, scientific research and community service at the local, national and regional levels. The Pharmaceutical Technology Department also aspires to creativity, leadership and innovation in the field of pharmacology and pharmaceutical compounds and to advance the quality ladder to qualify a distinguished pharmaceutical technical cadre to work in various state institutions and the private sector to serve our dear country so that it takes its natural position among the countries of the developed world. It seeks excellence in pharmaceutical services dedicated to serving the patient and society at the local, regional and international levels.

2. Program Mission

The Department of Pharmacy Technologies is an educational and research institution of public benefit whose goal is human health. The department is keen to provide high-quality education and training using the latest multidisciplinary methods to prepare pharmacist assistants and pharmaceutical scientists who have high scientific and professional capabilities and skills to be leaders in their specialties who are able to spread health culture, provide the best health care in society, and develop scientific research for the well-being of society and human health.

3. Program Objectives

1. Preparing qualified pharmacists and pharmaceutical scientists to work in health institutions, community pharmacies, pharmaceutical laboratories, pathological analysis laboratories, and pharmaceutical factories, in addition to private

pharmaceutical marketing companies.

2. Updating and developing study plans to suit the labor market and community needs.

3. Taking into account the market need when developing related specializations in various fields of health.

4. Providing advanced and distinguished education to graduate professionally and research-qualified pharmacists.

4. Program Accreditation

The program has not received accreditation

5. Other external influences

The department's graduates serve the community in health institutions and

hospitals and through practical application in

Health centers and hospitals during summer training.

6. Program Structure							
Program Structure	Number of Courses	Credit hours	Percentage	Reviews*			
Institution	1	2	1.5				
Requirements							
College Requirements	2	5	3.8				
Department	34	129	94.5				
Requirements							
Summer Training							

Other		

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

7. Program Description							
Year/Level	Course Code	Course Name		Credit Hours			
First year/semester		Pharmacy	2	4			
the first		Principles					
(Week 15)							
First year/semester		Basics Of Organic	2	4			
the first		Chemistry					
(Week 15)							
First year/semester		Analytical	2	4			
the first		Chemistry					
(Week 15)							
First year/semester		Medical	1	0			
the first		terminology					
(Week 15)							
First year/semester		Microbiology	2	2			
the first							
(Week 15)							
First year/semester		Principle of	2	2			
the first		Physiology					
(Week 15)							
First year/semester		Human Rights and	2	0			
the first		Democracy					
(Week 15)							
First year/semester		Computer	1	2			
the first		application					
(Week 15)							
First year/semester		English	2	-			
the second							
(Week 15)							
First year/semester		حسابات صيدلانية	2	4			
the second		Pharmaceuticals					
(Week 15)		Calculation					

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First vear/semester	Basics Of Organic	2	4
the second	Chemistry	2	4
(Wook 15)	Chemistry		
(week 13)	Picebomietry	2	4
the eccord	Biochemistry	2	4
(Week 15)			
First year/semester	Physiology	2	2
the second			
(Week 15)			
First year/semester	Virology and	2	2
the second	parasite		
(Week 15)			
First year/semester	Biostatistics	2	0
the second			
(Week 15)			
First year/semester	Computer	2	1
the second	application		
(Week 15)			
Second year/first	Pharmaceutics	2	3
semester (week 15)			
Second year/first	Industrial Principles	2	3
semester (week 15)			
Second year/first	Principles Of	2	3
semester (week 15)	Pharmaceutical		
Second year/first	Principles of Drugs	2	3
semester (week 15)			
Second year/first	Basics of Therapeutic	2	2
semester (week 15)	Application		
Second vear/first	Medicinal Plants and	2	2
semester (week 15)	Natural Products		
Second year/first	Toxicology	2	_
semester (week 15)			
Second vear/first	Methodology		2
semester (week 15)			
Second	Industrial Pharmacv	2	3
vear/second	,		
Jear/Second			

		1	
semester (Week 15)			
Second	Pharmaceutical	2	3
year/second	Chemistry		
semester (Week 15)			
Second	Pharmaceutical	2	3
year/second	Chemistry		
semester (Week 15)			
Second	Pharmacology	2	3
year/second			
semester (Week 15)			
Second	Therapeutic	2	2
year/second	Application		
semester (Week 15)			
Second	Pharmacognacy	2	2
year/second			
semester (Week 15)			
Second	Professional Ethics	2	-
year/second			
semester (Week 15)			
Second	Proposal	-	2
year/second			
semester (Week 15)			

8. Expected learning outcomes of the program						
Knowledge						
Learning Outcomes 1	• Lectures					
	Laboratories					
	summer training					
	Graduation Project					
Skills						
Learning Outcomes 2	1- Communication and conversation skills such as English and presentation skills					
	2_The skill of the student's ability to dialogue and discuss					
	3- Leadership skill, taking responsibility, and developing personality to serve the decision					
	4- Self-education and self-reliance skills					
Learning Outcomes 3	Monthly exams					
	• Daily exams					
	• Oral exams					

	final examsDiscussing quarterly research.						
Ethics							

9. Teaching and Learning Strategies

Teaching and learning strategies and methods adopted in implementing the program in general.

10. Evaluation methods

Implementing it in all stages of the program in general.

1. Faculty										
Faculty Members										
Academic Rank	Specialization		Special Requirements/Skills (if applicable)	Number of staff	f the teaching					
	General	Special		Staff	Lecturer					
Professor	Biology	Physiology		1						
Professor	Veterinary medicine	Medicines and toxins		\checkmark						
Professor	Chemistry	clinical Chemistry		\checkmark						
Assistant Professor	Law	Law		1						
Assistant Professor	Administration and Economics	Administration and Economics								
Assistant Professor	Biology	Biological resistance		\checkmark						
Lecturer	Veterinary medicine	Medicines and toxins								
Lecturer (2)	Chemistry	general chemistry		\checkmark						

Lecturer	ComputerScience	Computer			
assistant lecturer (3)	Biology	microbiology		\checkmark	
assistant lecturer	Biology	Physiology		\checkmark	
assistant lecturer	Biology	Medical parasitology		\checkmark	
assistant lecturer	Chemistry	analytical chemistry		\checkmark	
assistant lecturer	Veterinary medicine	Anatomy		\checkmark	
assistant lecturer	Chemistry	general chemistry			

Professional Development

Mentoring new faculty members

New members of the department are developed by introducing them to teaching methods

courses, conducting a teaching validity test, and holding a training course, seminars, and

workshops to train them in the approved work contexts.

Professional development of faculty members

Faculty members are developed by holding training courses, seminars and workshops to train them in approved work contexts

2. Acceptance Criterion

Central admission to the Ministry of Higher Education and Scientific Research

3. The most important sources of information about the program

- 1 Methodical books
- 2_ Supporting sources
- 3_ Public sources
- 4_ The Internet

4. Program Development Plan

Future plans include developing the laboratories of the Pharmacy Technology Department, as well as developing the curriculum by deleting, adding, and replacing

	Program Skills Outline														
				Required program Learning outcomes											
Year/Level Course Cour	Course Name	Basic or	Knov	wledge		Skills	5			Ethics	Ethics				
	coue		optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First year		Pharmacy Principles	Basic	V	\checkmark		V	V		V		V			V
		Basics Of Organic	Basic	V			V	\checkmark		V					
		Chemistry													
First year		Analytical Chemistry	Basic	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			
		Medical terminology	Basic	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark					
First year		Microbiology	Basic	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark			\checkmark	\checkmark
		Principle Physiology	Basic	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	
First year		Human Rights and	Basic	\checkmark	\checkmark	\checkmark		\checkmark	\checkmark	\checkmark	\checkmark		\checkmark		1
		Democracy													
		Computer	Optional	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark	
		application													

First year	English	Optional	V	\checkmark		V	V	V	\checkmark	\checkmark	\bigvee		V	
First year	Pharmaceuticals Calculation	Basic	1	V	V	V	1	1	V	V	\checkmark		1	
First year	Basics Of Organic Chemistry	Basic	1	V	V	V	V	V	V	V	V		V	\checkmark
First year	Biochemistry	Basic	\checkmark	V		\checkmark	\checkmark	\checkmark						V
First year	Physiology	Basic	V	V	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark		\checkmark			\checkmark
First year	Virology and parasite	Basic	V	V	V	V	1	V	V	V		V	V	\checkmark
First year	Biostatistics	Basic	V	V	V		\checkmark	V		V		\checkmark	V	
First year	Computer application	Optional	V	V	V	V	V	V	V	V	\checkmark		V	\checkmark

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

	Course Des	scription Form			
1. Course N	Name:				
Principles of pr	narmacy				
2. Course (Code:				
3. Semeste	er / Year:				
Semeste	r				
4. Descript	tion Preparation Date:				
2024/2/26					
5. Availabl	e Attendance Forms:				
Lectures	5 of Credit Hours (Total) / Nu	mber of Units (Total)			
H 90,U 6					
7. Course	administrator's name (me	ntion all, if more than one name)			
Email: n	b.hsn4@atu.edu.iq				
8. Course 0	Objectives				
Course Objectives	5	1. Shedding light on this subject to introduce the			
		first-year student to pharmacology, its history an			
		origins.			
		for the patient in general to determine how to			
		determine this prescription and which ensures th			
		its effect reaches the patient as much as possibl			
		3. Definition of medicine and its sources			
9. Teaching	g and Learning Strategies				
Strategy1.Future lecture method. 2. Thermal lecture method. 3. Method of discussion and dialogue					
10. Course St	ructure				

Week	Hou	Required Learning	Unit or subject	Learning	Evaluation	
	rs	Outcomes	name	method	method	
1_15	4	How to use laboratory, weig and how to measure Preparation of different kinds aromatic waters (chlorofo water, annis water, dill wat carwi water. benefit & propert Preparation of Mixtures (liquid +liquid). (liquid+ sol benefit & properties Preparation of Elixir Preparation of syrups Preparation of syrups Preparation of Lotions formulation, emulsions	Principles of Pharmacy lab	 1.Future lecture method. 2. Thermal lecture method. 3. Method of discussion and dialogue 	Dailytesting. 2. Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research	
1-14	6	Introduction, terms & instrument Kinds of water used in pharmacy, Method of preparations. Pharmaceutical calculation of dosage form. Formulation & compounding of drugs & Rx Mixtures of (liquid +liquid), (liquid + solid), benefit & properties Mixtures containing precipitate forming liquids Mixtures containing slightly soluble liquid Mixtures containing small doses of potent drugs Powders, definition, powders in packets, Bulked powder, Methods of preparation of compound powders, powder in small doses (Elixirs, definition, contents), (Syrups, definition, Kinds) Suspension dosage form properties Emulsion ,definitions, kinds, tests and choice of emulsifving agents	Principles of Pharmacy	1.Future lecture method. 2. Thermal lecture method. 3. Method of discussion and dialogue	Dailytestin g. 2. Semester exam. 3. Annual testing. 4.Discussin g quarterly And annual research	

11. Course Evaluation

The evaluation method is as follows: 15% for the theoretical exam and 25% for the theoretical exam outside of 40%. As for the final examination, it is 25% for the practical exam and 35% for the

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Lectures by the subject professor
Main references (sources)	Enclopedi of pharmaceutical technology
Recommended books and references (scientific journals,	Methodical books
reports)	
Electronic References, Websites	Virtual electronic library

1. Course Name:

Basics Of Organic Chemistry

- 2. Course Code:
- 3. Semester / Year:

Semester

- 4. Description Preparation Date: 2024/2/26
- 5. Available Attendance Forms: Lectures
- 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Units
- 7. Course administrator's name (mention all, if more than one name) Name: Thikra Jawad
 - Email: thikra.jawad@atu.edu.iq

8. Course Objectives

Course Objectives	1. The student learns about the principles ar
	basics of organic chemistry for simple alipha
	and aromatic compounds, including structure

			classificatio	n, nomenclature, ir	nteraction and	
			properties.	properties.		
			2. The stud	lent should be able	e to understand	
			and know t	he mechanism of c	rganic reaction	
			intermediat			
			Intermediate	es, concepts of act	aity and stabili	
			of aromatic	molecules, as well	l as heterocycli	
			chemistry a	ind stereochemistry	/.	
			3. The stud	lent will be able to	learn the differ	
			methods fo	r identifying the str	uctural	
			compositior	n of organic compo	unds	
9 Te	aching a	nd Learning Strategies				
	1	The theoretical lecture met	hod			
	2	Scientific lecture method	nou.			
	3	Method of discussion and d	ialogue			
			laiogue			
10.	Cour	se Structure				
10. Week	Cour Ho	se Structure Required Learning Outcomes	Unit or	Learning	Evaluati	
10. Week	Cour Ho ur	se Structure Required Learning Outcomes	Unit or subject name	Learning method	Evaluati on	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes	Unit or subject name	Learning method	Evaluati on method	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat	Unit or subject name	Learning method 1.Future lecture	Evaluati on method 1.Dailytesting	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety.	Unit or subject name	Learning method 1.Future lecture method.	Evaluati on method 1.Dailytestin 2.Semester	
10. Week	Cour Ho ur s 6 4	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of	Unit or subject name	Learning method 1.Future lecture method. 2. Thermal lecture	Evaluati on method 1.Dailytestin 2.Semester exam. 2. Annual	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds	Unit or subject name	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of	Evaluati on method 1.Dailytesting 2.Semester exam. 3. Annual testing	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration).	Unit or subject name Basics Of Organic Chemistry	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and	Evaluati on method 1.Dailytestin 2.Semester exam. 3. Annual testing. 4.Discussing	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification	Unit or subject name Basics Of Organic Chemistry	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue	Evaluati on method 1.Dailytestin 2.Semester exam. 3. Annual testing. 4.Discussing quarterly	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue	Evaluati on method 1.Dailytesting 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization regrutallization	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue	Evaluati on method 1.Dailytesting 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of organic	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue	Evaluati on method 1.Dailytestin 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research	
10. Week	Cour Ho ur s	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of orga compounds	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue	Evaluati on method 1.Dailytesting 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research	
10. Week	Cour Ho ur s 6 4	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of orga compounds Sublimation.separation	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue	Evaluati on method 1.Dailytestin 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 1.Dailytesti	
10. Week	Cour Ho ur s 6 4	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of orga compounds Sublimation.separation purification of orga	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue	Evaluati on method 1.Dailytesting 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 1.Dailytesti ng. 2. Cu	
10. Week	Cour Ho ur s 6 4	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of orga compounds Sublimation.separation purification of orga compounds(Distillation).Physi	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue 1.Future lecture method	Evaluati on method 1.Dailytesting 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 1.Dailytesti ng. 2. Semester	
10. Week	Cour Ho ur s 6 4	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of orga compounds Sublimation.separation purification of orga compounds(Distillation).Physi properties;Determination (melting = point) Ouiz & unknow	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue 1.Future lecture method. 2. Thermal	Evaluati on method 1.Dailytestin 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 1.Dailytesti ng. 2. Semester exam. 3. Annual	
10. Week	Cour Ho ur s 6 4	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of orga compounds Sublimation.separation purification of orga compounds(Distillation).Physi properties;Determination (melting –point).Quiz & unknow Determination of boiling point.	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue 1.Future lecture method. 2. Thermal lecture	Evaluati on method 1.Dailytesting 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 1.Dailytesti ng. 2. Semester exam. 3. Annual testing.	
10. Week	Cour Ho ur s 6 4	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of orga compounds Sublimation.separation purification of orga compounds(Distillation).Physi properties;Determination (melting –point).Quiz & unknow Determination of boiling point. Quiz & unknown.I.Introduct	Unit or subject name Basics Of Organic Chemistry lab Basics Of Organic	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue 1.Future lecture method. 2. Thermal lecture method.	Evaluati on method 1.Dailytestin 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 1.Dailytesti ng. 2. Semester exam. 3. Annual testing. 4.Discussin	
10. Week	Cour Ho ur s 6 4	se Structure Required Learning Outcomes Typeof Glass ware (Laborat equipment) and safety. Care & uses of the balance. Separation & purification of organicCompounds (Filtration). Separation & purification organic compounds Extraction.Crystallization recrystallization.Separation purification of orga compounds Sublimation.separation purification of orga compounds(Distillation).Physi properties;Determination (melting –point).Quiz & unknow Determination of boiling point. Quiz & unknown.I.Introduct to safety in the use of	Unit or subject name Basics Of Organic Chemistry lab	Learning method 1.Future lecture method. 2. Thermal lectur method. 3. Method of discussion and dialogue 1.Future lecture method. 2. Thermal lecture method. 3. Method of	Evaluati on method 1.Dailytesting 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 1.Dailytesti ng. 2. Semester exam. 3. Annual testing. 4.Discussin g quarterly	

	chemicals.II.Identification,	discussion and	And
	classification and labeling of	dialogue	annual
	chemicals		research
	III.Chemical safety cards		
	IV.Transport and storage of		
	chemicals Introduction		
	in organic chemistry chemical		
	bonds; Bonding in organic		
	compounds; hybridization.		
	Electron configuration;		
	chemical formulas isomerism.		
	Optical Isomerism		
	Stereochemistryof organic		
	compounds.		
	(Alkane)Nomenclature : physical		
	properties ; Structures ; chemical		
	properties		
	Preparations methods ; reactions ,		
	Hydrocarbo unsaturated (Alkenes)		
	Nomenclature ; physical properties		
	structure ;Chemical properties;		
	Reaction of carbon – carbon		
	Cvclo Alkane : structure :		
	nomenclature, phiscal& chemical		
	properties ; structure ; reactions		
	preparation methods . Hydrocarbons 111 (Alkens)		
	Nomenclature: physical & chemical		
	properties reaction; preparations		
	methods.		
	Aromatic hydrocarbons (Benzene)		
	aromatic		
	hydrocarbons.		
	Chemical properties of Benzene		
	Electrophilic aromatic substitution.		
	physical & chemical		
	properties.Chemical		
	reaction; preparations methods.		
	rientific subcure, preparation, reaction uses pharmacy.		
	Organic chemical instrumentation		
	spectroscopy;		
	Intrared spectroscopy, UV, visible,		
	mass- spectrometry.		
11. C	Course Evaluation		•
The evaluat	ion method is as follows: 15% for t	he theoretical exam and 25% for t	he theoretical
exam outsic	le of 40%. As for the final examinati	on, it is 25% for the practical exam	and 35% for
the		-	
12. L	earning and Teaching Resources		

Required textbooks (curricular books, if any)	Organic chemistry mccurry;5 th ed
Main references (sources)	Organic Chemistry by Robert T Morrison, Robert Boyd, 6th Edition 6th Edition. McMurry, J. (2008) Organic Chemistry. 7th Edition, Thomson Brooks Cole
Recommended books and references (scientific journals, reports)	Methodical books
Electronic References, Websites	Virtual electronic library
	·
1. Course Name:	
Analytical Chemistry	
2. Course Code:	
3. Semester / Year:	
Semester	
4. Description Preparation Date:	
2024/2/26	
5. Available Attendance Forms:	
Lectures	
6. Number of Credit Hours (Total) / Number of	Units (Total)
Hours 90, 6 Unit	
7. Course administrator's name (mention all	, if more than one name)
Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq	

8. Cou	ırse Obj	ectives				
8. Cou	ırse Obj	ectives		1. The stud principles of chemical re- various cor 2. The stud chemical an including pri- titration of v analysis an 3. The stud different me appropriate	ent learns the basic of analytical chemis eactions and methon centrations dent discusses the nalysis of various n rimitive ones, such various types, such d chromatography. dent will be able to ethods in choosing one to analyze ea	c concepts a try, including ds for calcula principles of naterials, as chemical as spectros apply these the most ch substance
9. Tea	ching a	nd Learning Strategies		according t 4. The stuc knowledge the concen them and e specificatio	o its characteristics lent will be able to to different medicir tration of the active ensure that they cor ns	and comport apply this nes to detern ingredients mply with the
	1. 2. 3.	The theoretical lecture meth Scientific lecture method. Method of discussion and di	10d. ialogu	e		
13.	Cour	se Structure				
Week	Ho ur s	Required Learning Outcomes	Un sul	it or oject name	Learning method	Evaluat on methoc
15	4	Introduction, terms & instrument Kinds of water used in pharmacy, Method of preparations. Pharmaceutical calculation of dosage form. Formulation & compounding of drugs & Rx		Analytical Chemistry	 1.Future lecture method. 2. Thermal lecture method. 3. Method of 	1.Dailytest 2.Semester exam. 3. Annual testing.

		Mixtures of (liquid +liquid) , (liquid+ solid), benefit & properties Mixtures containing precipitate forming liquids Mixtures containing slightly soluble liquid Mixtures containing small doses of potent drugs Powders, definition, powders in packets, Bulked powder, Methods of preparation of compound powders, powder in small doses (Elixirs, definition, contents), (Syrups, definition, Kinds) Suspension dosage form properties Emulsion , definitions, kinds, tests and choice of emulsifying agents		lab	discussion and dialogue	4.Discussing quarterly And annual research
15	2	Classification of analytical chemistry. Solutions, molecular weight, equivalent weight. Reliability of analytical data. Gravimetric analysis-volumetric analysis, concentration of solutions, molarity and normality Preparation of solutions (molarity and normality). Preparation (solutions of part per millions). Examples: molarity, normality Standard solution, classification, preparation methods. Neutralization reaction-titration of strong acid against strong base- oxidation- Reduction reaction. Examples: volumetric analysis, chemical equilibrium, ionization constant of water. PH-values (for strong and weak acid) and for (strong and weak base). Buffer solutions, classification, properties, colorimetric analysis and its Methods Beer- limber's law-calibration curve. Fraction spectrum.		Analytical Chemistry	1.Future lecture method. 2. Thermal lecture method. 3. Method of discussion and dialogue	 Dailytesti ng. Semester exam. Annual testing. Discussin g quarterly And annual research
14.	Cour	se Evaluation				
The eva exam o the	aluation utside of	method is as follows: 15% for t f 40%. As for the final examinati	he th: ion, it	eoretical exar is 25% for th	n and 25% for the practical exam	ne theoretical and 35% for
15.	Lear	ning and Teaching Resources	\$			
Require	d textboo	oks (curricular books, if any)		Fundamentals	of Analytical cher	mistry by Skoo

Main references (sources)	Chemical Analysis in the Laboratory A Basic Guide,
Recommended books and references (scientific	Modern Pharmaceutical Drug Analysis, by
journals, reports)	L. Zachmeister And I. Ven Chelnelm ISBN
	(13 (
	9-2718-224-81-978 :
Electronic References, Websites	Internet link
1. Course Name:	
Medical terminology	
2. Lourse Lode:	
3. Semester / Year:	
Semester	
4. Description Preparation Date:	
2024/2/26	
2024/2/20	
5. Available Attendance Forms:	
Lectures	
6. Number of Credit Hours (Total) / Number of	Units (Total)
Hours 15, 1 Unit	
7. Course administrator's name (mention all	, if more than one name)
	·
Name: San Anwar Jaarar	

8. Coi	ırse Obj	ectives					
Cou	Course Objectives				 Definition of medical terms and their maps Know the basic elements of the medical word Knowledge of the anatomical position, body levels body cavities 		
9. Tea	iching a	nd Learning Strategies		0		<u> </u>	
16	 The theoretical lecture method. Scientific lecture method. Method of discussion and dialogue 						
10.	Cour	Se Structure	linit or		Leerning	Evoluati	
vveek	но	Required Learning Outcomes	Unit or		Learning	Evaluati	
	s		Subject II	ante	metrioù	method	
15	1	Introduction to Medical Terminology, Define and historical of medical terminology. Basic Elements of a Medical Word, Word root Examples combining form. Common prefix and suffixes. Overview of Anatomy and Physiology. Anatomical Position, Body Planes and Body Cavities. Clinical, Radiologic, and Diagnostic Procedures. Digestive System Integumentary System The Musculoskeletal System The Reproductive System The Reproductive System The Urinary System The Urinary System The Cardiovascular System Blood , Lymph and Immune Systems Nervous system	Medical termino	ology 1 r 2 r 3 c c	L.Future lecture nethod. 2. Thermal lectur nethod. 3. Method of discussion and dialogue	1.Dailytesting 2.Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research	

17. Course Evaluation	
The evaluation method is as follows: 15% for the the exam outside of 40%. As for the final examination, in the	neoretical exam and 25% for the theoretical t is 25% for the practical exam and 35% for
18. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Lectures by the subject professor
Main references (sources)	Methodical books
Recommended books and references (scientific journals, reports)	Research or pathological cases to study from hospitals
Electronic References, Websites	Virtual electronic library
1. Course Name:	
Microbiology	
2. Course Code:	
3. Semester / Year:	
Semester	
4. Description Preparation Date:	
2024/2/26	
5. Available Attendance Forms:	
Lectures	
6. Number of Credit Hours (Total) / Number o	f Units (Total)
Hours 90, 4 Unit	
7. Course administrator's name (mention a	II, if more than one name)
Name: hawraa ali , Khulood Abdul-Majeed Mo Email: <u>hawraa.ali.iba15@atu.edu.iq</u> Khulood.jafeer@atu.edu.iq	ohamed Jafeer

_	•					
8. Co	ourse O	bjectives				
Course Objectives 1. The student learns about the various microscopic organisms, bacteria, parasite fungi, by reviewing their general character and their methods of reproduction and spin addition to determining their epidemiol 2. The student will be able to know the mimportant methods used in diagnosis and prevention 9. Teaching and Learning Strategies The theoretical lecture method. Scientific lecture method. Method of discussion and dialogue					the various reria, parasites, a reral characterist uction and sprea eir epidemiology to know the mos diagnosis and	
10	Cour	se Structure				
Week	Hours	Required Learning Outcomes	Unit or		Learning	Evaluation
			subject	name	method	method
15	2	Safety in lab, tools and instrument Sterilization, disinfection Smear Preparation Staining (Gram, Ziehl-Neelsen stain) Culture media (Preparation + types) Antibiotic sensitivity test Gram negative bacteria Gram positive bacteria Clostridium, spore staining, an aerobic culture Mycobacterium Pharmacodynamical interactions Drug contamination Mycology	Micro la	biology ab	 1.Future lecture method. 2. Thermal lectur method. 3.Method of discussion and dialogue 	1.Dailytesting. 2.Semester exa 3. Annual testi 4.Discussing quarterly And annual research
		-History of biosafety microbiology and molecular	Microb	biology		

15	2	biology -Biosafety levels , Personal protetive equipment -Laboratory facilities and safety equipmen - Disinfection,decontamination , and sterilization. Introduction, bacterial shapes, bacterial cell structure and toxins Bacterial growth curve, oxygen requirement and PH Types of immunity, antigen and antibodies Antibiotics and antibiotics resistance Enterobacteriaceae (E. coli, Salmonella and Proteus)Pseudomonas, Vibrio Neisseria, H pylori Staphylococci Streptococci Mycobacterium, Corynebacterium Spores, Clostridium Chlamydia, Treponema Microbiota Drug contamination Introduction			1.Future lecture method. 2. Thermal lecture method. Method of discussion and dialogue	 1.Dailytestin g. 2. Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 	
		to mycology, types of fungal					
11.	11. Course Evaluation						
The evam	valuatior outside (n method is as follows: 15% for of 40%. As for the final examinat	the th tion, i	neoretical e t is 25% fo	exam and 25% for r the practical exam	the theoretical m and 35% for	
12.	Learı	ning and Teaching Resources	5				
Required textbooks (curricular books, if any)		Lectures by the subject professor					
Main references (sources)		Warren levinson					
Recommended books and references (scientifi		ntific	ific Methodical books				
journa	ls, report	s)					
Electro	onic Refe	rences, Websites		Virtu	al electronic librar	у	

1. Course Name:

Principle of Physiology

2. Course Code:

3. Semester / Year:

Semester

4. Description Preparation Date:

2024/2/26

5. Available Attendance Forms:

Lectures

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

Hours 60, 4 Unit

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

Name: hanan.hammood Email: hanan.hammood@atu.edu.iq

8. Course Objectives

Course Objectives	1. The student is able to identify the functions of the
	various body systems and describe their mechanism of
	action
	2. The student can estimate the normal and abnormal
	values of the various body systems
	3. Learn how to explain the amount of change in the
	normal functions of the various accompanying body
	systems

9. Teaching and Learning Strategies

The theoretical lecture method. Scientific lecture method.

Method of discussion and dialogue									
10.	Cour	se Structure							
Week	Hours	Required Learning Outcomes	Unit or	Learning	Evaluation				
			subject name	method	method				
15	2	The microscope , structures and uses Making and staining of blood film Smearing and staining blood film The enumeration of red blood cells The enumeration of white blood cells Differential count Estimation of hemoglobin Identification of blood grouping	Principle of Physiology _{lab}	 1.Future lecture method. 2. Thermal lectur method. 3.Method of discussion and dialogue 	1.Dailytesting. 2.Semester exa 3. Annual testi 4.Discussing quarterly And annual research				
15	2	Cells and tissues , types of tissues Transport substances across cell membrane Blood , functions , types of cells, plasma , blood group Cardio vascular system , heart and blood vessels , cardiac cycle , blood Circulation Heart rhythm , SA node , electrocardiogram Respiratory system, functions , regulation of blood ph. digestive system , functions , organs and their secretion digestive tract, movement , accessory organs	Principle of Physiology	 1.Future lecture method. 2. Thermal lecture method. Method of discussion and dialogue 	 Dailytestin g. Semester exam. Annual testing. Discussing quarterly And annual research 				
11.	Cour	se Evaluation							
The even exam the	valuatior outside o	n method is as follows: 15% for of 40%. As for the final examina	the theoretical e tion, it is 25% fo	exam and 25% for r the practical exa	the theoretical m and 35% for				

12. Learning and Teaching Resources Required textbooks (curricular books, if any) Lectures by the subject professor Main references (sources) Pathophysiology Conale Recommended books and references (scientific journals, reports) Research or pathological cases to study from hospitals Electronic References, Websites Virtual electronic library I. Course Name: Human Rights and Democracy 2. Course Code: 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives						
Required textbooks (curricular books, if any) Lectures by the subject professor Main references (sources) Pathophysiology Conale Recommended books and references (scientific journals, reports) Research or pathological cases to study from hospitals Electronic References, Websites Virtual electronic library 1. Course Name: Human Rights and Democracy 2. Course Code:	12. Learning and Teaching Resources	5				
Main references (sources) Pathophysiology Conale Recommended books and references (scientific journals, reports) Research or pathological cases to study from hospitals Electronic References, Websites Virtual electronic library I. Course Name: Virtual electronic library Human Rights and Democracy 2. Course Code: Semester 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives L The student locene shout casting our generation of formation of the student locene shout casting our generation of formation of the student locene shout casting of the student locene shout casting of formation of the student locene shout casting of formation of the student locene shout casting o	Required textbooks (curricular books, if any)	Lectures by the subject professor				
Recommended books and references (scientific journals, reports) Research or pathological cases to study from hospitals Electronic References, Websites Virtual electronic library 1. Course Name: Virtual electronic library Human Rights and Democracy 2. 2. Course Code: Semester 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 1. The student locene obsticention entione of of the student locene obsticentione of the student locene obsticention o	Main references (sources)	Pathophysiology Conale				
journals, reports) Inspirals Electronic References, Websites Virtual electronic library 1. Course Name: Human Rights and Democracy 2. Course Code:	Recommended books and references (scie	ntific Research or pathological cases to study from				
Electronic References, Websites Virtual electronic library 1. Course Name:	journals, reports)					
1. Course Name: Human Rights and Democracy 2. Course Code: 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives	Electronic References, Websites	Virtual electronic library				
1. Course Name: Human Rights and Democracy 2. Course Code: 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives						
1. Course Name: Human Rights and Democracy 2. Course Code: 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives						
1. Course Name: Human Rights and Democracy 2. Course Code: 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives	1 Course Norse					
Human Rights and Democracy 2. Course Code: 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives Latter Betwiester	1. Course name:					
2. Course Code: 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives Course Objectives 1. The student learne about centinguage apprendice of formation of the student learne about centinguage apprendice of formation of the student learne about centinguage apprendice of formation of the student learne about centinguage apprendice of formation of the student learne about centinguage apprendice of formation of the student learne about centinguage apprendice of formation of the student learne about centinguage apprendice of the student learne about tentinguage apprendice of the student learne about tenting apprendice of tenting apprendic	Human Rights and Democracy					
3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives	2. Course Code:					
 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives 						
 3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives 						
Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives	3. Semester / Year:					
 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives Course Objectives 	Semester					
2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives	4. Description Preparation Date:					
2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives						
 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives 	2024/2/26					
Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives 1. The student learne about centinuous awaranees of	5. Available Attendance Forms:					
 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives 	Lectures					
Hours 30, 2 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives	6. Number of Credit Hours (Total) / Number o	f Units (Total)				
 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives 1. The student learns about continuous awareness of 	Hours 30. 2 Unit					
 7. Course administrator's name (mention all, if more than one name) Name: Hani Abdullah Omran						
Name: Hani Abdullah Omran Email: hani.omran @atu.edu.iq 8. Course Objectives Course Objectives	7. Course administrator's name (mention a	all, if more than one name)				
Email: hani.omran @atu.edu.iq 8. Course Objectives 1. The student learns about continuous awareness of	Name: Hani Abdullah Omran					
8. Course Objectives	Email: hani.omran @atu.edu.iq					
8. Course Objectives	0. Course Obiestings					
Course Objectives	8. Course Objectives					
1. The student learns about continuous awareness of	Course Objectives 1.	The student learns about continuous awareness of				
human rights and the fundamental freedoms associated	hur	nan rights and the fundamental freedoms associated				
with them	with	n them				

		2	. The student must	be able to fight eve	erything that aims			
	ignore it, undermine it, or undermine its sanctity							
3. Learn about the concept of democracy and its								
		r	elationship to public	freedoms				
9. Teaching and Learning Strategies								
The theoretical lecture method. Scientific lecture method. Method of discussion and dialogue								
10. Cou	urse Stru	ucture						
Week	Hours	Required Learning	Unit or	Learning	Evaluation			
		Outcomes	subject name	method	method			
5	2	Human rights - their definition - their goals Human rights in ancient civilizations, especially the Mesopotamian civilization Human rights in divine laws, with a focus on human rights in Islam Human rights in contemporary and modern history - international recognition of human rights since World War I and the League/United Nations Regional recognition of	Human Rights and Democracy	1.Future lecture method. Thermal lecture method. 3.Method of discussion and dialogue	1.Dailytesting. 2.Semester exa Annual testing 4.Discussing quarterly And annual research			

The evaluation method is as follows: 15% for the theoretical exam and 25% for the theoretical exam outside of 40%. As for the final examination, it is 25% for the practical exam and 35% for the

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Lectures by the subject professor
Main references (sources)	Human Rights Dr. Maher Saleh Allawi
Recommended books and references (scientific journals,	Methodical books
reports)	
Electronic References, Websites	Virtual electronic library

1. Course Name:

Computer application 1

2. Course Code:

3. Semester / Year:

Semester

4. Description Preparation Date:

2024/2/26

5. Available Attendance Forms:

Lectures

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

Hours 45, 3 Unit

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

Name: Ali Hamza Email: inb.ali210@atu.edu.iq

8. Course Objectives

Course Objectives	1. Enabling the student to understand all types of compu
	software that can be used
	2. The student can use the computer at any time

			3. The s at the ap	tudent is abl ppropriate tin	e to interact with e	ducational lesson
9. Te	aching	and Learning Strategies				
The theoretical lecture method. Scientific lecture method. Method of discussion and dialogue						
10.	Cou	rse Structure				
Week	Hours	Required Learning Outcom	nes Unit	or	Learning	Evaluation
15		Practical axamples of	sub	ject name	method	1 Dailytosting
15	2	bractical examples of browsing, opening and closing windows and dialog boxes The correct way to handle the keyboard and cursor Other devices. -Practical examples of customization, dealing with icons, and changing screen resolution Trainin the student to create a new user, enlarge the windows and display them Keyboard recognition On the physical components of the calculate - Training the student to de with computer software licensesIts types and dealin with origin The original software. Training the student to deal with Computer security. Training the student to deal with computer privacy	apj g n n g d l or. eal ng l	lication 1 lab	1.Future lecture method. 2. Thermal lectur method. 3.Method of discussion and dialogue	1.Danytesting. 2.Semester exan 3. Annual testin 4.Discussing quarterly And annual research
	2	Computer Fundamentals The concept of the computer stages of the computer life cycle, development of computer generations The computer and its areas use. Computer classification	er, C apj s of n	omputer plication 1	 1.Future lecture method. 2. Thermal lecture method. Method of 	 1.Dailytesting. 2. Semester exam. 3. Annual testing. 4.Discussing quarterly

	in terms of purpose, size and type data Computer's components Components Computer Computer components are the physical parts For computer entities Software Your personal computer, computer security concept and software licenses Computer security and software licenses Computer Safety & Software Licenses Creator of the electronic world, forms of abuse, computer security, computer privacy	discussion and dialogue	And annual research		
11.	Course Evaluation		<u> </u>		
The events of the exam	valuation method is as follows: 15% for the routside of 40%. As for the final examination,	theoretical exam and 25% for it is 25% for the practical exa	r the theoretical am and 35% for		
12.	Learning and Teaching Resources				
Requir	ed textbooks (curricular books, if any)	Lectures by the subject	t professor		
Main r	Main references (sources) Computer basics and office applications Microsoft office powerpoint 2013				
Recon	mended books and references (scientific	Methodical books			
Electro	nic References, Websites	Virtual electronic libra	ry		
1. Cou	irse Name:				
Pharma	aceuticals Calculation				
2. Cou	rse Code:				
3. Sen	iester / Year:				
Sen	nester				

4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: Hassan Adheem Abbas Email: nb.hsn4@atu.edu.iq 8. Course Objectives **Course Objectives** 1. Enable the student to understand pharmaceutical data 2. The applicant must be able to understand measurement systems and pharmaceutical calculations 3. Learn how to prepare various pharmaceutical preparations 4. The student will be able to memorize pharmaceutical preparations, their classification, and their benefits 9. Teaching and Learning Strategies The theoretical lecture method. Scientific lecture method. Method of discussion and dialogue 10. **Course Structure** Week Hours **Required Learning Outcomes** Unit or Learning Evaluation subject name method method Pharmaceuti 1.Future lecture 1.Dailytesting. Demonstration of different 15 4 cals glass wares and equipment method. 2.Semester exa Calculation used in the field of pharmacy 2. Thermal lecture Annual testing. Lab method. Pharmaceutical 4.Discussing quarterly And measurements. 3.Method of

		Volume measurements Preparation of aromatic waters Preparation of simple solutions. Reducing and enlarging prescription contents. Percentages in calculating prescription contents. Stock solutions and dilution technique during dispensing technique)			discussion and dialogue	annual researc	
15	2	Careless calculations cost lives Units of measure Ratios and proportions Multi-dose vials Concentration and dilution Percentage volume-in- volume Percentage weight-in-weight Ratio strength Percent of error Apothecary system	Pha Ca	armaceutic als lculation	1.Future lecture method. 2. Thermal lecture method. 3.Method of discussion and dialogue	 Dailytesting. Semester exam. Annual testing. Discussing quarterly And annual research 	
11.	Cour	se Evaluation	<u> </u>				
The eva exam o the	aluation utside of	method is as follows: 15% for t f 40%. As for the final examinat	che th ion, it	eoretical e t is 25% for	xam and 25% for the practical exa	the theoretical m and 35% for	
12.	Lear	ning and Teaching Resources	6				
Require	d textboo	oks (curricular books, if any)		Lectur	es by the subject p	orofessor	
Main ref	erences	(sources)		Pharmace	utical calculations	Ansel	
Recomn	Recommended books and references (scientific				ttific British pharmacopoeia United State Pharmacopoeias European Pharmacopeias		
Electron	Electronic References, Websites				Virtual electronic library		
				I			
1. Cou	irse Na	me:					
Basics	Of Org	anic Chemistry					
2. Cou	irse Coo	le:					

3. Semester / Year: Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
Semester 4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
4. Description Preparation Date: 2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
2024/2/26 5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
5. Available Attendance Forms: Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
Lectures 6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
6. Number of Credit Hours (Total) / Number of Units (Total) Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
Hours 90, 6 Unit 7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
7. Course administrator's name (mention all, if more than one name) Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq 8. Course Objectives Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
8. Course Objectives 1. Identify aromatic hydrocarbons (benzene). Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
Course Objectives 1. Identify aromatic hydrocarbons (benzene). 2. Reaction and diagnosis of aromatic carboxylic acid. 3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
 Reaction and diagnosis of aromatic carboxylic acid. Preparation and reaction of amine uses in pharmacy Identify reactions and identify aldehydes. 						
3. Preparation and reaction of amine uses in pharmacy 4. Identify reactions and identify aldehydes.						
4. Identify reactions and identify aldenydes.						
9. Teaching and Learning Strategies						
The theoretical lecture method. Scientific lecture method. Method of discussion and dialogue						
10. Course Structure						
Week Hours Required Learning Outcomes Unit or Learning Evaluation						
subject name method method						

15	4	Solubiling& classification . Determination of solubilities of organic compounds Quiz & unknown . Reaction & identification of alcohols .Quiz & unknown . Reactions & identification of aldehydes .Quiz & unknown . Reaction & identification of Ketons .Quiz & unknown . Reaction & identification of aliphatic/ Carboxylic acid./ Quiz & unknown/Reaction & identification of aromatic carboxylic acid.Identification of esters .Identification of aromatic Hydrocarbons (Benzene) .Quiz & unknown . Identification of amines Compounds	Basics Of Organic Chemistry Lab	 1.Future lecture method. 2.Thermal lectur method. 3.Method of discussion and dialogue 	1.Dailytesting. 2.Semester exan Annual testing. 4.Discussing quarterly And annual researc
15	2	Organic halogen compound (Alky / halide) Structure; Nomenclature; physical & chemical properties. Preparation & uses; reactions.(Nucleophilic substitution Alcohol; structure & nomenclature preparation; reaction; uses in pharmacy.Aldehydes & ketones ; structure nomenclature .Preparations method & reaction . Carboxylic acid <s derivatives structure ; nomenclature preparation methods<s reaction ; uses in pharmacy .Amine ; structure ; nomenclature physical properties ; Basicity of amine .Preparation & reaction of amine uses in pharmacyAromatic Diazonium salt; structure nomenclature ; preparation & reactions, theuses .Ethers ; structure ; nomenclature Physical and chemical	Basics Of Organic Chemistry	1.Future lecture method. 2. Thermal lecture method. 3.Method of discussion and dialogue	 1.Dailytesting. 2. Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research

	properties reactions .Ester ; structure ; nomenclature ; reaction .Merercaptons ; thiols (sulfur organic compound)Structure ; reaction Hetero cyclic compounds structure; nomenclature Physical and chemical properties. Hetero cycliccompoundsfivemember ed rings; six membered ring ; structure ; reaction .			
11.	Course Evaluation			
The eva exam ou the	luation method is as follows: 15% for the th atside of 40%. As for the final examination, it	eoretical exam and 25% for the theoretical is 25% for the practical exam and 35% for		
12.	Learning and Teaching Resources			
Required	textbooks (curricular books, if any)	*Organic Chemistry by J. McMurry, latest Thomason learning, CA, USA. 3_ introduction to the chemistry of heterocy compound by Acheson, R. M. latest ed		
Main refe	erences (sources)	McMurry, J. (2008) Organic Chemistry. 7th Edition, Thomson Brooks Cole		
Recomm journals,	nended books and references (scientific reports)	*Organic Chemistry by Robert T. Morrison ar Robert N. Boyed, latest edition		
Electroni	ic References, Websites	Wikipedia		
1. Cou	rse Name:			
Biocher	mistry			
2. Cou	rse Code:			
3. Sem	iester / Year:			
Sem	nester			
4. Des	cription Preparation Date:			
2024/2	/26			
5. Avai	ilable Attendance Forms:			

Lectur	es						
6. Nur	nber of	Credit Hours (Total)	/ Numbe	r of Units (Tota	l)		
Hours	90, 6 U	Init					
7. Co	urse ac	dministrator's name	(mentio	n all, if more t	han one name))	
Name: prf Sawsan Hassan kadhum Email: Sawsan_hassan@atu.edu.iq							
8. our:	se Obje	ectives					
Course (Objectives		1. Helping	to understand th	e principles of biod	hemistry	
			2. Providi	ng a solid foundat	tion for a successfu	Il chemical caree	
			3. Providi	ng the student wit	h some basic skills	s that may be	
			necessary	for future studies	s, such as analyzing	g results and	
			document	s and using the Ir	nternet.		
9. Tea	iching a	and Learning Strategie	es				
	S N	he theoretical lectur cientific lecture metl lethod of discussion	e metho hod. and dial	d. logue			
10.	Cou	rse Structure					
Week	Hours	Required Learning Ou	utcomes	Unit or	Learning	Evaluation	
				subject name	method	method	
15	4	Carbohydrates classification-properti monosaccharide react Unknown (discussion) Disaccharides- reactio Unknown, discussion- Polysaccharides-react Unknown, discussion- Lipids-classification-fa acids-hydrogenation. Determination of iodin and saponification. Proteins-classification	ies- tion.). on. •reports. tion. •reports. atty ne No.	Biochemistry Lab	 1.Future lecture method. 2.Thermal lectur method. 3.Method of discussion and dialogue 	1.Dailytesting. 2.Semester exan Annual testing. 4.Discussing quarterly And annual researc	

		amino acids-properties, reaction. Amino acids properties, reaction-testing and reports. Nucleic acid-nucleic proteins- discussionEnzymes and inhibitors-discussion. Hormones-properties, types, discussion, reports.Vitamins- types.Examination			
15	2	Biochemistry-Define- Importance. Carbohydrates- Define-Classification- Properties-Monosaccharides- Define-Properties-reactions. Disaccharides-Define-Types- Properties-chemical reactions. Polysaccharides- Define-Types-Properties- Chemical reactions and Reports. Metabolism of carbohydrates. Lipids-Define-classification- Fatty acids-classification- properties. Hydrations- rancidity-iodine number- saponification- metabolism of fat. Proteins-define- classification-properties. Amino acids-define classification-properties. Amino acids. Aucleic acids- nucleic proteins-reports Enzymes-define classification-properties- chemical reactions Metabolism of proteins and amino acids. Nucleic acids- nucleic proteins-reports Enzymes-define classification-properties- chemical reactions- enzymes inhibitors. Hormones-define- classification-properties- proteins hormone- functions. Non protein hormones classification.Vitamins- Types-properties-vitamin soluble in water. Vitamins soluble in fat-types properties.	Biochemistry	1.Futurelecture method. 2. Thermal lecture method. 3.Method of discussion and dialogue	1.Dailytesting. 2. Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research
11.	Cour	se Evaluation			

The evaluation method is as follows: 15% for the theoretical exam and 25% for the theoretical exam outside of 40%. As for the final examination, it is 25% for the practical exam and 35% for the

12. Learning and Teaching Resources		
Required textbooks (curricular books, if any)	Harper, s illustrated biochemistry	
Main references (sources)	Lehninger(principles of biochemistry	
Recommended books and references (scientific	Stryer (biochemistry) voet (biochemistry)	
journals, reports)		
Electronic References, Websites	Wikipedia	

1. Course Name:

Physiology

2. Course Code:

3. Semester / Year:

Semester

4. Description Preparation Date:

2024/2/26

5. Available Attendance Forms:

Lectures

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

Hours 60, 4 Unit

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

Name: Name: hanan.hammood Email: hanan.hammood@atu.edu.iq

8. course Objectives

Course Objectives

1. Study of many different diseases that affect the human body

	2. Study of the physiology and pathogenesis of diseases							
			occurring within the body.					
			3. Identify	the most promine	ent clinical signs ac	companying the		
			occurrence	e of diseases.				
			4. Identifv	diseases that aff	ect organs in all bo	odv svstems		
0 Too	obina	and Learning Strategi						
9. Tea	cning	and Learning Strategi	es					
		The theoretical lectur	re metho	od.				
		Scientific lecture met	hod.					
		Method of discussion	and dial	logue				
10.	Со	ourse Structure						
Week	Hour	s Required Learning O	utcomes	Unit or	Learning	Evaluation		
				subject name	method	method		
15	2	The erythrocyte		-	1.Future lecture	1.Dailytesting.		
		sedimentation rate		Lab Physiology	method.	2.Semester example		
		Bleeding and clotting	time	Тнузююду	2.Thermal lectur	Annual testing.		
		temperature Tracing	ouy of the		Method of	4.Discussing		
		pulse Heart sound	or the		discussion and	annual researc		
		Measurement of bloo	d		dialogue			
		pressure The effect of	f					
		exercises on blood pr	essure					
		The electrocardiogram	III ts uses					
		in the measurement of	of					
		respiratory volume						
		Systems and parts of	the					
		human body	,					
		Demonstration of nat	ural					
		statemnervous syster	n. define					
		, parts of nervous syst	tem,					
		functions Nerves , syr	napses					
	2	,neurotransmitters.Au	utonomi		1 Futurelecture	1.Dailytesting.		
15	2	c nervous system , fui	nctions,		method.	exam.		
15		urinary system struc	sure		2. Thermal	3. Annual		
		functionsRegulation.f	function		lecture	testing.		
		s of the kidneys Musc	les ,		method.	4.Discussing		
					3 Method of	auartarly		
	ļ	type, functions,	, ,	Physiology	discussion and	And annual		

	types , functionsRegulation of body temperatureent and posters	dialogue	research					
11.	Course Evaluation		·					
The evaluation	tion method is as follows: 15% for the theore	etical exam and 25% for the	e theoretical exam					
12.	Learning and Teaching Resources	the practical exam and 55	5% 101 the					
Require	d textbooks (curricular books, if any)	Physiology						
Main ref	ferences (sources)	Pathophysiology Conale						
Recomn	nended books and references (scientific , reports)	Research or pathological hospitals	cases to study from					
Electron	ic References, Websites	Virtual electronic library	,					
1. Cou	ırse Name:							
Virolog	v and parasite							
2. Cou	irse Code:							
3. Sen	nester / Year:							
Sen	nester							
4. Des	cription Preparation Date:							
2024/2	2/26							
5. Ava	ilable Attendance Forms:							
Lectur 6. Nur	es nber of Credit Hours (Total) / Number of	Units (Total)						
Hours	60, 4 Unit							
7. Cou	urse administrator's name (mention al	l, if more than one nar	ne)					
Name: Email: Khuloo	Name: hawraa ali , Khulood Abdul-Majeed Mohamed Jafeer Email: hawraa.ali.iba15@atu.edu.iq Khulood.jafeer@atu.edu.iq							

8. course Objectives								
Dbjectives	 Knowing diagnose the Knowledg types of para Knowledg Identify Knowing Knowing 	 Knowing the diseases of the body, types of parasites, and how diagnose them. Knowledge of various parasitological analyzes to diagnose the types of parasites. Knowledge of all diseases through cultivation of slides. Identify viruses. Knowing the types of diseases caused by viruses Knowing how to diagnose viruses and how to treat them. 						
iching a	nd Learning Strategies							
The theoretical lecture method. Scientific lecture method. Method of discussion and dialogue								
Hours	Required Learning Outcomes	Unit or	Learning	Evaluation				
		subject name	method	method				
152Microbiological sa Electron microsco Tissue culture Emi egg Lab animals Se diagnosis Immunochromato PCR Entamoeba hi 		Lab Virology and parasite	 1.Future lecture method. 2.Thermal lecture method. 3.Method of discussion and dialogue 	1.Dailytesting. 2.Semester examples and testing. 4.Discussing quarterly And annual researc				
	rse Obj Dbjectives	rse Objectives Dejectives Dejectives 1. Knowing diagnose the 2. Knowledg types of par 3. Knowledg 4 Identify 5. Knowing 6. Knowing 6. Knowing 1. Identify 5. Identify	rse Objectives Dejectives Dejectives I. Knowing the diseases of the diagnose them. 2. Knowledge of various parasitypes of parasites. 3. Knowledge of all diseases 4 Identify viruses. 5. Knowing the types of diseated in the diagnose of the diseases of the diagnose of the diseases diseases dite	rse Objectives Dejectives I. Knowing the diseases of the body, types of paradiagnose them. 2. Knowledge of various parasitological analyzes types of parasites. 3. Knowledge of all diseases through cultivation 4. Identify viruses. 5. Knowing the types of diseases caused by viru 6. Knowing how to diagnose viruses and how to thing and Learning Strategies The theoretical lecture method. Scientific lecture method. Scientific lecture method. Method of discussion and dialogue Course Structure Hours Required Learning Outcomes Q Microbiological safety cabinet Electron microscope Tissue culture Embryonated egg Lab animals Serological diagnosis Immunochromatography PCR Entamoeba histolytica, Giardia LambliaTrichomonas vaginalis, Leishmania Plasmodium, Toxoplasma gondii Enterobius vermicularis, Ascaris Immorking aspinata Taenia solium				

15	2	Introduction tovirology, virus structure,classification, viralreplication Antivirals andvaccines DNA envelopedViroloviruses (Herpes simplexpvirus, Cytomegalovirus,pVaricella-Zoster virusDNA non envelop virusesDNA non envelop viruses(Human Papilloma virus,Adenovirus)Mumps, measles,Rubella Influenza,Cornavirus, Rota Hepatitisviruses, HIVIntroduction to Parasitology,classification, antiparasiticsdrugs Entamoeba histolytica,Giardia Lamblia Trichomonasvaginalis, LeishmaniaPlasmodium, Toxoplasmagondii Nematodes (Enterobius vermicularis,Ascaris lumbricoides)Trematodes (Schistosomaspp) Cestodes Echinococcusgranulosus (hydatid cyst)Taenia saginata Taenia			1.Futurelecture method. 2. Thermal lecture method. 3.Method of discussion and dialogue	 1.Dailytesting. 2. Semester exam. 3. Annual testing. 4.Discussing quarterly And annual research 	
11	0	solium					
	Cour	se Evaluation					
outside of 4	40%. As f	for the final examination, it is 25 ⁶	% for	the practica	al exam and 35%	for the	
12.	Lean	ning and Teaching Resources	6				
Require	d textboo	ks (curricular books, if any)		Lectures b	y the subject prof	essor	
Main ref	erences	(sources)		Methodical books			
Recomn	nended	books and references (scie	ntific	Medical microbiology,sixteenedition			
journals,	, reports.)		E.Jawetz,J.	L.		
Electron	Electronic References, Websites			Virtual electronic library			
1. Course Name:							
Biostat	istics						
2. Course Code:							

3. Sen	nester /	Year:				
Sen	nester					
4. Des	criptio	n Preparation Da	te:			
2024/2	2/26					
5. Ava	ilable A	ttendance Forms:				
Lectur	es					
6. Nur	nber of	Credit Hours (Tot	al) / Numbe	er of Units (Tota	l)	
Hours	30, 2 U	nit				
	,					
7. Cou	urse ad	ministrator's nar	ne (mentio	n all, if more t	han one name)	
Name:	saadia	.alsultani				
Email:	saadia	.alsultanı@atu.ec	du.iq			
8. cou	rse Obje	ectives				
Course C	bjectives		. The studen	t will be able to p	rocess and analyze	e statistical data,
			reach correc	t conclusions, and	l prepare a statistic	cal form
9. Tea	ching a	nd Learning Strate	egies			
	T	ne theoretical lec	ture metho	od.		
	Sc м	cientific lecture n	nethod. ion and dia	ใกฐมอ		
	141			iugue		
10.	Cour	se Structure				
Week	Hours	Required Learning	g Outcomes	Unit or	Learning	Evaluation
				subject name	method	method
15	2	Definition of statis collection methods	stics. Data s -		1.Future lecture method.	 Dailytesting. Semester exa
		presenting and des	scribing	Biostatistics	2.Thermal lectur	Annual testing.
		staustical data			methoa.	4.DISCUSSING

"Representing frequency distributions," tabulated data "tabular display," and distribution tables Repetitiveness Graphical display - histogram histogram, histogram, and polygon. Measures of central tendency -Arithmetic mean . The	,		3.Method of discussion and dialogue	quarterly And annual researc		
mediator. The mode. Life statistics, ratio and rate Fertility statistics. Disease statistics - life tables. Definition of health statistics and its sources. Fields treated by health statistics. Statistics of causes of death (medical certificate, cause, death, death certificate). Statistics of health institutions	Bio	ostatistics	1.Futurelecture method. 2. Thermal lecture method. 3.Method of discussion and dialogue	 Dailytesting. Semester exam. Annual testing. Discussing quarterly And annual research 		
11. Course Evaluation						
The evaluation method is as follows: 15% for the outside of 40%. As for the final examination, it is 2	theore 5% for	tical exam a the practic	and 25% for the the the the the the the the second se	neoretical exam for the		
12. Learning and Teaching Resource	es					
Required textbooks (curricular books, if any)		Lectures b	y the subject prof	essor		
Main references (sources)		Modern Pharmaceutical Drug Analysis, by L. Zechmeister ,And L. Von Cholnoky, ISBN (13) • 978-81-224-2718-9				
Recommended books and references (sc	ientific	Methodical books				
Flectronic References Websites	Virtual electronic library					
1. Course Name:						
Computer application 1						

2. Cou	irse Coo	le:						
3. Sen	nester /	Year:						
Ser	nester							
4. Des	criptio	n Preparation Da	te:					
2024/2	2/26							
5. Ava	ilable A	ttendance Forms:						
Lectur	es							
6. Nur	nber of	Credit Hours (Tot	al) / Numbe	er of Units (Tota	l)			
Hours	45, 3 U	nit						
7. Co	urse ad	ministrator's nar	ne (mentio	n all, if more t	han one name))		
Name:	Ali Ha	mza						
Email:	nb.ali2	10@atu.edu.iq						
8. cou	rse Obje	ectives						
Course C	Objectives		1. The stude	ent must be familia	ar with various calc	ulator application		
			2. To be able	e to distinguish be	etween the types o	f software that ca		
			be interacted	l with.				
9. Tea	ching a	nd Learning Strate	egies					
	The theoretical lecture method.							
Scientific lecture method.								
	Method of discussion and dialogue							
10.	Cour	se Structure						
Week	Hours	Required Learning	g Outcomes	Unit or	Learning	Evaluation		
				subject name	method	method		

15	2	Write many texts and train		1.Future lecture	1.Dailytesting.
		the student to conduct them	Computer	method.	2.Semester example
		Events.	application 1	2.Thermal lectur	Annual testing.
		- Training the student to	lab	method.	4.Discussing
		create texts in different		3.Method of	quarterly And
		formats		discussion and	annual researc
		And drag it onto the printer.		dialogue	
		-Practical exercises on texts			
		within the documentGiving			
		names of companies or			
		Students And train the			
		student on Find and replace a			
		specific name. Training the			
		student on page layout,			
		training view tab On writing			
		texts Giving practical			
		examples of inserting			
		training objects Writing texts			
		in a more professional			
		manner Giving practical			
		examples of the Insert tab			
		group of pages Give practical			
		examples of a set of tables			
		Giving other practical			
		examples of a group of tables			
		Training the student on a set			
		of illustrations -Insert a			
		specific picture and assign			
		the student to conduct these			
		activities. Training the			
		student to write texts that			
		include currency symbols			
		Special letters, scientific			
		symbols, etcTraining the			
		student to write equations			
		that include additionformulas			
		b and raise als and matrices			
		in different formsTraining			
		the student to create tables			
		and enter data -Practice			
		opening a new file andstoring			
		it on the desktop Add and			
		edit slides (title slide, title			
		with Content, subtitle, two			
		contents, comparison, title			
		only,Y with caption, image			
		with caption.) - Add and edit			
		content slide types			
		-Training on deleting, moving			
		and rearranging slides. Add a			

with caption.) - Add and edit content slide types -Training on deleting, moving and rearranging slidesAdd a .theme- Applying the Slide Master activity - Adding animations And set the time and repetition for entire slides Differently for each segment.						
11. Course Evaluation						
The evaluation method is as follows: 15% for the theore outside of 40% As for the final examination, it is 25% for	tical exam and 25% for the theoretical exam					
12. Learning and Teaching Resources						
Required textbooks (curricular books, if any)	Lectures by the subject professor					
Main references (sources)	Computer basics and office applications Microsoft office powerpoint 2013					
Recommended books and references (scientific	Methodical books					
journals, reports)						
Electronic References, Websites	Virtual electronic library					
1. Course Name:						
English						
2. Course Code:						
3. Semester / Year:						
Semester						
4. Description Preparation Date:						
2024/2/26						
5. Available Attendance Forms:						
Lectures						
6. Number of Credit Hours (Total) / Number of Units (Total)						

Hours 30, 2 Unit														
7. Course administrator's name (mention all, if more than one name)														
Name Email	:													
8. course Objectives														
Course Objectives		 Providing students with basic skills to communicate in the Engli language The student should be able to use English grammar correctly a 												
			employ writin	ng skills according	to sound foundation	ons.								
9. Tea	aching a	nd Learning Strat	egies											
Scientific lecture method. Method of discussion and dialogue														
10.	Cour	se Structure				10. Course Structure								
Week	Hours	Required Learning	g Outcomes	Unit or										
				subject name	Learning	Evaluation method								

		preposition).Pronunciation . Translation.Everyday English (Directions) Grammar (was/ were, past tense , irregular verbs). Writing(Famous people). Vocabulary (Words groups) . Past tense (We had a good time).Grammar (past simple, regular verbs, irregular verbs) . Listening (Mike's day), Writing (Last Saturday).Questions (Where, What, Who, etc.).Everyday English (Fill in forms) Exercises .Activities (We can do it).Listening (Can I be in your Pop group ?). Pronunciation (can / can't). Requests and offers .Everyday English (What is						
		the problem?) . Vocabulary (odd one out Exercises.Asking						
		politely (I want , would like). Speaking in the restaurant (food and drink)Translation . Reading (You are what you eat).						
11.	11. Course Evaluation							
The evaluation method is as follows: 15% for the theoretical exam and 25% for the theoretical exam outside of 40%. As for the final examination, it is 25% for the practical exam and 35% for the								
12. Learning and Teaching Resources								
Required textbooks (curricular books, if any)		Headway						
Main references (sources)		British council website						
Recom	Recommended books and references (scientific		Basics of the English language					
journals	journals, reports)							
Electronic References, Websites			Virtual electronic library					