Academic Program Description Form

University Name: Tikrit University
Faculty/Institute: College of Education -Tuz khurmatu
Scientific Department: Department of Life Sciences
Academic or Professional Program Name: Bachelor's degree
Final Certificate Name: Bachelor of Life Sciences
Academic System: Annual
Description Preparation Date: / / ٢٠٢٦
File Completion Date Date: / / ٢٠٢٦

Signature:
Head of Department Name:
Lec. Dr. Turkan Ahmed
Hama
Date: 27 / 4 / 2026

Signature:
Scientific Associate Name:
Assis. Lec. Ali Salah ZaynlAbdein
Date: 27 / 4 / ٢٠٢٦

The file is checked by:
Department of Quality Assurance and University Performance
Name of the Director of the Quality Assurance and University Performance Department:
Lec. Dr. Samar Nashat Ali
Date: / / ٢٠٢٦
Signature: Dr. Samar

Signature:
Approval of the Dean :
Prof. Dr. Nihad Ali Shafeek

1. Program Vision

The vision of the Department of Life Sciences is to prepare an aware generation capable of keeping pace with scientific developments in all areas of life in general and physics in particular. Since its establishment, this department has worked to graduate educational and teaching staff with a high level of efficiency and practical experience.

2. Program Mission

The mission of the Life Sciences Department is educational and scientific, working to raise scientific generations capable of keeping pace with scientific developments in various cultural fields. Its highest mission is to provide the competent professor who keeps pace with his reality and keeps pace with it with a spirit keen on knowledge and learning.

3. Program Objectives

- Preparing highly skilled male and female teachers.
- Preparing a generation of distinguished researchers in life sciences.
- Serving the community by providing life sciences information.
- Developing faculty members scientifically and culturally.
- Explaining the great importance of life sciences and its role in society.

4. Program Accreditation

Nothing

5. Other external influences

Many holidays in the school year

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	5	10	50%	
College Requirements	2	6	20%	
Department Requirements	52	24	50%	
Summer Training				
Other				

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
First	101BGB	General Biology	**2**	**2**
	102BCB	Cell Biology	2	2
	103BPA	Plant Anatomy	2	2
	104BGC	General Chemistry	1	2
	105AL	Arabic Language	1	–
	106EP	Developmental and Educational Psychology	2	–
	107DHR	Human Rights and Democracy	1	–
	108CO	Computer	1	–
	109BGE	Geology	1	–
	110FL	Fundamentals of Education	1	–
	111EL	English Language	1	–
	112BS	Biosafety Language	1	–
Second	215BPC	Pant Taxonomy	2	2
	216BEM	Embryology	2	2
	217BIN	Invertebrates	2	2
	218BHI	Histology	1	2
	219BBI	Biochemistry	2	1
	220BBS	Teaching Thinking	1	–
	221CO	Computer	1	–
	222DP	Curriculums and School Books	1	2

	223EASE	Leadership and Educational Administration	2	–
	224EL	English Language	1	–
	225BPC	Baath Regime Crimes	1	–
	226AL	Arabic Language	1	–

8. Expected learning outcomes of the program

Knowledge

A- The student is able to understand the various branches of life sciences

B- Preparing physics teachers at levels that keep pace with the development taking place.

C- The student understands the individual differences between students.

D- The student understands the correct foundations of scientific research.

Skills

A- The student acquires the skills of describing life sciences

B- The student acquires the skills of working in laboratories.

C- The student is able to work on qualifying himself to become a successful educational and scientific leader.

D- The student learns the correct foundations to become a successful life sciences teacher.

Ethics

A- Loves his assigned work.

B- Loves knowledge.

C- Adopts the dialogue method between the student and the teacher.

D- Ability to work in a multidisciplinary team.

9. Teaching and Learning Strategies

- Classroom education through scientific lectures.
- Preparing reports and research.
- Practical learning in scientific laboratories

10. Evaluation methods

- Processing method using final grades.
- Random and surprise tests.
- Monthly theoretical tests and practical reports on the curriculum taught.

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Prof.Lec. Dr.	Life Sciences	Biological and evolutionary classification of plant			↗	
Lec. Dr	Life Sciences	Parasites			↗	
Lec. Dr.	Agricultural sciences	Forestry			↗	
Assis. Lec.	Life Sciences	Medical Parasites			↗	
Assis. Lec.	Chemistry sciences	Biochemistry			↗	
Assis. Lec.	Life Sciences	Animal physiology			↗	
Assis. Lec.	Chemistry sciences	Organic chemistry			↗	
Assis. Lec.	Chemistry sciences	Physical chemistry			↗	
Assis. Lec.	Life Sciences	Microbiology			↗	
Assis. Lec.	Chemistry sciences	Physical chemistry			↗	
Assis. Lec.	Arabic Language	Methods of teaching Arabic			↗	
Assis. Lec.	Life Sciences	Entomology			↗	
Assis. Lec.	Life Sciences	Animal physiology			↗	
Assis. Lec.	Agricultural sciences	Horticultural and landscape Architecture			↗	

Assis. Lec.	Teaching Curricula and Methods	General Teaching methods			↗	
Assis. Lec.	English Language	English Teaching Methods			↗	

Professional Development

Mentoring new faculty members

The head of the department directs new faculty members to adhere to working hours and lecture times and urges them to develop their academic abilities in order to provide the correct delivery to the student.

Professional development of faculty members

The head of the department develops a plan for faculty members that includes classroom and extracurricular activities for students in order to improve the level of the educational process. He also urges them to adhere to lecture times, record absences, and pay attention to all exams.

12. Acceptance Criterion

(**Central admission**

13. The most important sources of information about the program

- Books prescribed by the Ministry of Higher Education and Scientific Research.
- External scientific confiscations.
- Use of central libraries and the Internet.

14. Program Development Plan

Striving to make the physics specialization have a tangible practical application, through applying physical concepts, phenomena and principles to reality and contemporary society, in addition to courses and seminars that give the teaching staff the ability to keep pace with similar programs in countries around the world in order to obtain accreditation through developing curricula and thus developing the academic program and working on it in the correct manner.

Program Skills Outline

				Required program Learning outcomes											
Year/ Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First	101BGB	General Biology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	102BCB	Cell Biology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	103BPA	Plant Anatomy	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	104BGC	General Chemistry	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	105AL	Arabic Language	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	106EP	Developmental and Educational Psychology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	107DHR	Human Rights and Democracy	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	108CO	Computer	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	109BGE	Geology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	110FL	Fundamentals of Education	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	111EL	English Language													
	112BS	Biosafety Language													
Second	215BPC	Pant Taxonomy	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	216BEM	Embryology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	217BIN	Invertebrates	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	218BHI	Histology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	219BBI	Biochemistry	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	220BBS	Teaching Thinking	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	221CO	Computer	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	222DP	Curriculums and School Books	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	223EASE	Leadership and Educational Administration	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	224EL	English Language	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	225BPC	Baath Regime Crimes	Basic	*	*	*	*	*	*	*	*	*	*	*	*

	226AL	Arabic Language	Basic	*	*	*	*	*	*	*	*	*	*	*	*

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

نموذج وصف المقرر

1. اسم المقرر:
تصنيف النبات (عملي)
2. رمز المقرر:
215BPC
3. الفصل / السنة: السنوي
2026-2025
4. تاريخ إعداد هذا الوصف
17-2-2026
5. أشكال الحضور المتاحة :
حضور الزامي
6. عدد الساعات الدراسية (الكلي)/ عدد الوحدات (الكلي):
عدد الساعات =60 ساعة , عدد الوحدات = 6 وحدات (4 وحدات نظري + 2 وحدة عملي)
7. اسم مسؤول المقرر الدراسي (اذا اكثر من اسم يذكر)
الاسم : م.د. سمار نشأت علي samar.n.ali@tu.edu.iq م.د. علي اكرم موسى
8. اهداف المقرر

اهداف المادة الدراسية	• قدرة الطلبة على معرفة الخصائص العامة لتصنيف النبات . • قدرة الطلبة على التمييز والادراك المعرفي في تشخيص الصفات المظهرية للنبا البذرية . • ان يكون الطالب قادر على استخدام الاجهزة المختبرية .

9. استراتيجيات التعليم والتعلم

الاستراتيجية	• استخدام وسائل ايضاح الكترونية . • تكليف الطلبة بعمل البحوث والتقارير . • تكليف الطلبة بالواجبات الخاصة بالمادة العلمية .

10. بنية المقرر

الأسبوع	الساعات	مخرجات التعلم المطلوبة	اسم الوحدة او الموضوع	طريقة التعلم	طريقة التقييم
1	2 عملي	فهم موضوع المحاضرة	الجذور : اشكالها وتحويراتها	حضوري	الاداء الصفي والامتحانات

2	2 عملي	فهم موضوع المحاضرة	السيقان : اشكالها وتحويراتها	حضوري	الاداء الصفي والامتحانات
4-3	2 عملي	فهم موضوع المحاضرة	الاوراق : اشكالها وتحويراتها	حضوري	الاداء الصفي والامتحانات
7-6-5	2 عملي	فهم موضوع المحاضرة	الازهار - اجزاء الزهرة	حضوري	الاداء الصفي والامتحانات
9-8	2 عملي	فهم موضوع المحاضرة	الانظمة الزهرية (النورات)	حضوري	الاداء الصفي والامتحانات
11-10		فهم موضوع المحاضرة	الثمار والبذور	حضوري	الاداء الصفي والامتحانات
13-12-14	2 عملي	فهم موضوع المحاضرة	عوائل الزهرية النباتية	حضوري	الاداء الصفي والامتحانات
16-15	2 عملي	فهم موضوع المحاضرة	القانون الزهري والمسقط الزهري	حضوري	الاداء الصفي والامتحانات
25-17	2 عملي	فهم موضوع المحاضرة	دراسة عائلة من ذوات الفلقة الواحدة وذات الفلقتين وعاريات البذور بواقع (4-3)	حضوري	الاداء الصفي والامتحانات

11. تقييم المقرر

الاسئلة الشفوية داخل المحاضرة والتحضير اليومي = 10%
امتحانات يومية قصيرة (امتحان مفاجئ) = 10%
امتحان شهري وتقديم تقارير = 80%

12. مصادر التعلم والتدريس

الكتب المقررة المطلوبة (المنهجية أن وجدت)	تصنيف النبات – يوسف الكاتب
المراجع الرئيسة (المصادر)	تصنيف النباتات الزهرية – علي الموسوي

الكتب والمراجع الساندة التي يوصى بها (المجلات العلمية، التقارير....)	تصنيف النباتات والتوزيع الجغرافي للنباتات البري – الفلا العراقية النباتية
المراجع الإلكترونية ، مواقع الانترنيت	

Course Description Form

1. Course name:

Biosecurity and safety

2. Course code:

3. Semester/Year:

Annual

4. Date this description was prepared:

2025/11/1

5. Available forms of attendance:

In-person education

6. Number of study hours (total) / Number of units (total):

15 hours theoretical

7. Name of the course supervisor (if more than one name is mentioned)

Name: M.M. Baneen Ali Asker
Email: banen.ali.tuz.@tu.edu.iq

8. Course objectives

Introducing students to the concepts of safety and biosecurity, the types of biological risks to which workers in biological laboratories are exposed, and the levels of safety in biological laboratories.

Personal and public safety equipment, as well as methods and procedures for reducing risks.

9. Teaching and learning strategies

Cognitive objectives	**1- Students understand and differentiate between the concepts of biosafety and biosecurity.** **2- Students know the levels of laboratory safety.** **3- Students learn about the types of biological waste in the laboratory. Students learn** **4- about the mechanism for disposing of biological waste in laboratories. Students learn** **5- about the methods for containing biological hazards in the laboratory.**
Specific skill goals	**1- Students learn how to use personal protective equipment (laboratory gowns,** **And gloves and various protectors).** **2- Introducing students to dealing with different sharp tools.** **Glassware in the laboratory.** **3- Students differentiate between types of biological waste.** **4- Students distinguish between different guidance and warning signs.**

10. Course structure

The week	Watches	Required learning outcomes	Unit name or the topic	Learning method	Evaluation method
the first	1 hour theoretical	Definition of safety and health Professionalism and its objectives And how to achieve it	Occupational Safety and Health	Theoretical	According to point 11 Below and only need
the second	1 hour theoretical	1- Distinguish between the concept of safety 1- Vitality and biosecurity. 2- Determine the level Laboratory safety	Introduction to Safety And biosecurity in The laboratory 2- Safety levels Vitality	Theoretical	According to point 11 Below and only need
the third	1 hour theoretical	1- Identify the type Biological hazards 2- Determine the level of danger of the organism or agent. Pathogenic Biologist	Biological hazards	Theoretical	According to point 11 Below and only need
Fourth	1 hour theoretical	Students distinguish between safety requirements and follow procedures to contain risks.	Ways to control Biological hazards	Theoretical	According to point 11 Below and only need
Fifth-Sixth	1 hour theoretical	Students distinguish between types of signposts.	Signs And the warning	Theoretical	According to point 11 Below and only need
Seventh	1 hour theoretical		First exam		
Eighth-Ninth	1 hour theoretical	1- Students distinguish between types biological waste 2- Students learn about the methods Trading and dealing With laboratory waste	Types of biological waste	Theoretical	According to point 11 Below and only need
tenth	1 hour theoretical	Students learn the concept of biosecurity and the impact of factors Biology on society and environment	Biosecurity	Theoretical	According to point 11 Below and only

					need
eleventh	1 hour theoretical	Students learn the basics of risk assessment.	Biological risk assessment	Theoretical	According to point 11 Below and only need
twelfth	1 hour theoretical		Second exam		According to point 11 Below and only need
13th 1 hour		Learn how to manage Risks	Risk management methodology	Theoretical	According to point 11 Below and only need
14th 1 hour	theoretical	1- Identify policies Handling information sensitive related With the security program Biology. 2- Introducing students to the mechanisms Transport of biological materials Methods of containing risks during transportation	Information security	Theoretical	According to point 11 Below and only need
15th	1 hour theoretical	Students learn about the criteria and conditions. Allowed research	Sharia research and codes of conduct and practice	Theoretical	According to point 11 Below and only need

11. Course Evaluation

1- Oral assessment through student participation in
2- discussions. Short tests (Quiz).
3- Monthly and semester exams.

12. Learning and teaching resources

Required textbooks (methodology if any)	
Main References (Sources)	Iraqi Ministry of Health, 2020. Shamisen, Amman, of higher education and scientific research and practices material. In corporation of Iraqi Ministry 1-The guidance of Biosafety managements, Jordan

	2- WHO, 2020, Laboratory biosafety manual Fourth edition, Geneva, Austria. Associations, Laboratory Biosafety and Biosecurity 3-The International Federation of Biosafety Risk Assessment Technical Guidance Document, SANDIA National Laboratories, USA. 4- Guidelines for the Shipping and Receiving .Biological Materials
Recommended supporting books and references (scientific journals, reports...)	
Electronic references, websites	-WHO, 2020, Laboratory biosafety manual fourth edition, Geneva, Austria. -The International Federation of Biosafety Guidance Document, SANDIA National Biosecurity Risk Assessment Technical Associations, Laboratory Biosafety and Laboratories - Guidelines for the Shipping and Receiving Biological Materials. Northern Kentucky University.

Course Description Form

.1 Course Name:	
TheArabic Language	
.2 Course Code:	
AL 226	
.3 Semester / Year: Annual	
First and Second Semester of Academic Year 2025 – 2026	
.4 Date of Preparation of This Description	
17/ 9/ 2025	
.5 Available Attendance Modes:	
Theoretical	
.6 Total Number of Academic Hours / Total Credit Units:	
30 Hours / 2	
.7 Name of Course Coordinator (mention all if more than one)	
Asst. Lect. Wejdan Hamid Ibrahim Email: wejdan.h.ibrahim@tu.edu.iq	
.8 Course Objectives	
*This course aims to provide students with comprehensive knowledge of Arabic linguistics.. *Familiarizing students with some rules and fundamentals of the Arabic language.. *Focusing on the outcomes of the College of Education Tuz Khurmatu in order to graduate a generation capable of occupying educational positions in the Ministry of Higher Education and the Ministry of Education..	**Course Objectives**
.9 Teaching and Learning Strategies	
Delivering lectures through modern educational media using technology presenting illustrative slides of scientific models via display screens. 2. Delivering practical lectures relying on the smart screen. 3. Preparing scientific reports.. 4. Field visits to thescientific library.. Opening the floor for scientific discussions among students to enhance comprehension and broaden	**Strategy**

cognitive understanding.. Lectures Interactive Lecture discussion Dialogue and Discussion Brainstorming Brainstorming	

Course Structure .10

Assessment Method	Teaching Method	Unit / Topic Name	Required Learning Outcomes	Hours	Week
Classroom Performance and Daily Written Tests	Attendance	The Holy Quran Surah Al-Isra, Verses (23 – 29)	Understanding the lecture topic	1	1
Classroom Performance and Daily Written Tests	Attendance	Arabic Grammar: Present Tense Verb – Accusative and Jussive Cases	Understanding e Lecture Topic	1	2
Performance Classroom and Daily Written Tests	Attendance	From the Noble Prophetic Hadith: "Indeed, Allah loves when of you performs a task to do it with excellence."	Understanding e Lecture Topic	1	3
Classroom Performance and Daily Written Tests	Attendance	Verses from the Poetry of Al-Sharif Al-Radi "I weep for you; if only my weeping could quench the thirst" "And I say, if only words could heal my pain"	Understanding the lecture topic	1	4
Classroom Performance and Daily Written Tests	Attendance	Rules for Writing Taa (Open and Closed) Stages of Language Compilation	Understanding the lecture topic	1	5

Performance Classroom and the	Attendance	Monthly Examination	Monthly Examination	1	6
Classroom Performance and Daily Written Tests	Attendance	Hymn of the Rain / Al-Sayyab	Understanding the lecture topic	1	7
Classroom Performance and Daily Written Tests	Attendance	Accusative Nouns (Al-Mansubat)	Understanding the lecture topic	1	8
Classroom Performance and Daily Written Tests	Attendance	Arts of Prose	Understanding the lecture topic	1	9
Classroom Performance and Daily Written Tests	Attendance	Rules for Writing Dhad and Dha Rules for Writing Alef (Extended and Shortened)	Understanding the lecture topic	1	10
Classroom Performance and Daily Written Tests	Attendance	Lexicology: Vocabulary and Semantics	Understanding the lecture topic	1	11
Classroom Performance and Daily Written Tests	Attendance	O Benevolent Tigris / Al-Jawahiri	Understanding the lecture topic	1	12

Classroom Performance andand the W	Attendance	Monthly Examination	Monthly Examination	1	13
Classroom Performance and Daily Written Tests	Attendance	Arabic Grammar: Numbers and Their Rules Followers (Al-Tawabi') Common Linguistic Errors	Understanding the lecture topic	1	14
Classroom Performance and Daily Written Tests	Attendance	Al-Mutanabbi's Mimiya: "How my heart aches for one whose heart is cold" "And the one with whom es the sickness of my body and state"	Understanding the lecture topic	1	15
Classroom Performance and Daily Written Tests	Attendance	From Surah Yusuf (Verses 1–7)	Understanding the lecture topic	1	16
Classroom Performance and Daily Written Tests	Attendance	Noun Declension (Tasrif Al-Asma): Nouns in Terms of Masculine and Feminine Nouns in Terms of Root and Derived Forms Nouns in Terms of Singular, Dual, and Plural	Understanding the lecture topic	1	17
Classroom Performance and Examination Written	Attendance	Monthly Examination	Monthly Examination	1	18
Classroom Performance and Daily Written Tests	Attendance	m the Noble Hadith: ("Do not envy another; do not outbid one another...")	Understanding the lecture topic	1	19

Classroom Performance and Daily Written Tests	Attendance	Arabic Rhetoric: (Semantic Embellishments) (Rhetorical Figures of Speech)	Understanding the lecture topic	1	20
Classroom Performance and Daily Written Tests	Attendance	Methodology of my School (Al-Maqayis) and (Al-Sihah)	Understanding the lecture topic	1	23
Classroom Performance and Monthly Examination	Attendance	Monthly Examination	Monthly Examination	1	24

11. Course Assessment

Grade Distribution out of 100 According to Assigned Student Tasks:
1. Daily Preparation and Oral Questions: 10%
2. Daily Quizzes, Short Tests, and Surprise Examinations: 10%
3. Monthly Examinations and Report Submissions: 80%

12. Learning and Teaching Resources

	Required Textbooks (Curriculum–Based if available)
Quranic Exegesis: Al-Raghib Al-Asfahani. **Ibn Aqil's Commentary on Ibn Malik's Alfiyya.** **Shatha Al-Arf fi Fan Al-Sarf: Ahmad Al-Hamlawi.** **Rhetoric and Application: Ahmad Matlub.** **Jami' Al-Durus Al-Arabiyya: Mustafa Al-Ghalayini.**	Key References (Sources)
Peer-reviewed Scientific Journals published by Academic Publishers	Recommended Supporting Books and References (Scientific Journals, Reports, etc.)
Noor Library	Electronic References

: https://search.app/Jq64GAXPLriv3QBK6 General Arabic Language Library: https://t.me/langnnnarabic Arabic Literature Library: https://t.me/dewan55	and Internet Sources

Course description form

1. Course name: Educational and Developmental Psychology	
Foundations of Education	
2. Course code: 106EP	
3. Semester/Year:	
Annual	
4. This description was prepared at the beginning of the 2025-2026 academic year.	
5. Available attendance formats: In-person	
6. Total study hours/total units: 60 hours, number of units: 2	
7. Name of the course administrator (if more than one name is mentioned) /	
Name: Dr. Abd ulsattar Saleh Aasi Email abdelsattar.s.a@tu.edu.iq	
8. Course objectives	
	This course aims to introduce students to educational psychology, its concept and objectives; the concept of learning, its applications, theories, and educational applications; information processing theory; transfer of learning, its types, and feedback; motivation, its definition, functions, and theories; problem-solving; the historical background of learning; the concept, definition, and stages of linguistic and cognitive development; the stages of human development; and the differentiation between the branches of psychology.
9. Teaching and learning strategies	
.Brainstorming, dialogue, discussion, and some classroom activities - Using educational discussion (educational dialogue), which relies on exchanging - .ideas to arrive at facts .Group journaling to involve all students in classroom activities - - Presentations.	
10. Course structure	

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	week

Oral and written test	,Dialogue discussion, and brainstorming Presentations	Educational psychology: its definition, historical development, goals, and fields.	Educational psychology: its definition, historical development, goals, and fields.	3	1
Oral and written test	Dialogue, discussion and brainstorming Presentations	Education and learning: the concept and nature of the learning process	Education and learning: the concept and nature of the learning process	3	2
Oral and written test	Dialogue, discussion and brainstorming Presentations	Basic characteristics of learning and the difference between learning and teaching	Basic characteristics of learning and the difference between learning and teaching	3	3
Oral and written test	Dialogue, discussion and brainstorming Presentations	Theories of learning and teaching and their educational applications	Theories of learning and teaching and their educational applications	3	4
Oral and written test	Dialogue, discussion and brainstorming Presentations	Thorndike, Pavlov, Skinner, and Gestalt	Thorndike, Pavlov, Skinner, and Gestalt	3	5
Oral test	Dialogue, discussion and brainstorming Presentations	Social and cognitive learning theory	Social and cognitive learning theory	3	6
Oral and written test	Dialogue, discussion and brainstorming Presentations	First month exam	First month exam	3	7
Oral and written test	Dialogue, discussion and brainstorming Presentations	Remembering and Forgetting	Remembering and Forgetting	3	8
Oral and written test	Dialogue, discussion and brainstorming Presentations	Theories Explaining Forgetting: Main Theories Explaining Forgetting	Theories Explaining Forgetting: Main Theories Explaining Forgetting	3	9
Oral and written test	Dialogue, discussion and brainstorming Presentations	Information Processing Theory / Applications of the Theory and Transfer of Learning	Information Processing Theory / Applications of the Theory and Transfer of Learning	3	10

Oral and written test	Dialogue, discussion and brainstorming Presentations	Educational theories and applications, and assistive technologies for the transfer of learning.	Educational theories and applications, and assistive technologies for the transfer of learning.	3	11
Oral and written test	Dialogue, discussion and brainstorming Presentations	The concept, its nature, the factors influencing it, and its theories	The concept, its nature, the factors influencing it, and its theories	3	12
Oral and written test	Dialogue, discussion and brainstorming Presentations	Thinking, learning skills, habits, motivation, and classroom interaction	Thinking, learning skills, habits, motivation, and classroom interaction	3	13
Oral and written test	Dialogue, discussion and brainstorming Presentations	Problem solving and feedback	Problem solving and feedback	3	14
Oral and written test	Dialogue, discussion and brainstorming Presentations	Second month exam	Second month exam	3	15
Oral and written test	Dialogue, discussion and brainstorming Presentations	Developmental psychology	Developmental psychology	3	16
Oral and written test	Dialogue, discussion and brainstorming Presentations	Influencing factors	Influencing factors	3	17
Oral and written test	Dialogue, discussion and brainstorming Presentations	Research methods in developmental psychology	Research methods in developmental psychology	3	18
Oral and written test	Dialogue, discussion and brainstorming Presentations	Childhood	Childhood	3	19
Oral and written test	Dialogue, discussion and brainstorming Presentations	Mental development	Mental development	3	20
Oral and written test	Dialogue, discussion and brainstorming Presentations	The role of social institutions	The role of social institutions	3	21

Oral and written test	Dialogue, discussion and brainstorming Presentations	First month exam for the second semester	First month exam for the second semester	3	22
Oral and written test	Dialogue, discussion and brainstorming Presentations	adolescence	adolescence	3	23
Oral and written test	Dialogue, discussion and brainstorming Presentations	Adolescence and society	Adolescence and society	3	24
Oral and written test	Dialogue, discussion and brainstorming Presentations	Adolescence and career	Adolescence and career	2	25
Oral and written test	Dialogue, discussion and brainstorming Presentations	Teenagers' trends and inclinations	Teenagers' trends and inclinations	3	26
Oral and written test	Dialogue, discussion and brainstorming Presentations	Sources of acquiring inclinations and attitudes	Sources of acquiring inclinations and attitudes	3	27
Oral and written test	Dialogue, discussion and brainstorming Presentations	Adolescent problems	Adolescent problems	3	28
Oral and written test	Dialogue, discussion and brainstorming Presentations	Second month exam, semester 2	Second month exam, semester 2	3	29
Oral and written test	Dialogue, discussion and brainstorming Presentations	Aggressive behavior	Aggressive behavior	3	30

11. Course evaluation

- Theoretical exams
- Questions outside the box
- Oral exams

12. Curriculum and textbook

Abdel-Hadi, Nabil (2024): Educational • Psychology: Theories, Methods, and .Applications, Dar Al-Yazouri Al-Atoum, Alawneh, Al-Jarrah, and Ghazal • Educational Psychology: Theory and :(2013)	Main references (sources)

.Application, Dar Al-Masirah, Jordan ,Nashwati (2003): Educational Psychology • .Dar Al-Furqan, Jordan ,Abu Jadu (2003): Educational Psychology • .Dar Al-Masirah, Jordan Musan Paul, et al. (1986): Foundations of • Child and Adolescent Psychology, Al-Falah .Library, Kuwait • Arifaj, Sami (1992): Developmental Psychology, Majlawi, Jordan.	
	Recommended supporting books and references (scientific journals, reports...)
	Electronic references, websites

Course Description Form

1. Course Name:
Computer
2. Course Code:
H016
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2026
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours / 1 unit
7. Course administrator's name (mention all, if more than one name)
Name: kamaran Adil Ibrahim **Email: kamaran_zm@tu.edu.iq**

8. Course Objectives	
Course Objectives	*** Preparing and qualifying specialists to meet the requirements of the labor market in its public and private sectors by diversifying teaching and learning methods and training students to apply acquired knowledge and skills to solve real-world problems.** *** Creating an appropriate climate for students to enable them to apply their acquired knowledge and skills in identifying the needs and problems of society and social matters related to computers and information technology.** *** Providing distinguished academic programs in the field of computers, both theoretical and practical, that are consistent with international standards of academic quality and meet the needs of the labor market.** *** Encouraging and developing scientific research in the fields of computers in general and in the areas of office software suites (Office) in particular.** *** Developing the scientific and technical capabilities in educational laboratories and providing all their requirements.** *** Providing specialized laboratories for scientific research equipped with scientific capabilities to provide an opportunity for teaching staff to develop their abilities.** *** Working to publish scientific and qualitative articles and publications that**

	keep pace with the information development wheel in the world. * Holding specialized scientific conferences.

9. Teaching and Learning Strategies	
Strategy	Lecture method, laboratory dialogue, discussion, and giving examples.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Concepts of Hardware and Software with their components.	Introduction to Computers	Theoretical lecture	General questions, discussion, and monthly exams.
2	1	Concept of Computing, Data and Information; Applications of Information, Connecting input/output devices and peripherals to the CPU.	Introduction to Computers	Theoretical lecture	General questions, discussion, and monthly exams.
3	1	Computer Parts, Hardware Components, Input/Output Units.	Computer Components	Theoretical lecture	General questions, discussion, and monthly exams.
4	1	Memory Types: Volatile Memory and Non-Volatile Memory, Secondary Storage.	Computer Components	Theoretical lecture	General questions, discussion, and monthly exams.
5	1	CPU Components: Control Unit (CU), Arithmetic	Computer Components	Theoretical lecture	General questions, discussion, and monthly exams.

		Logic Unit (ALU) and Registers.			
6	1	Computer Ports, Personal Computer (Features and Types).	Computer Components	Theoretical lecture	General questions, discussion, and monthly exams.
7	1	Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques.	Operating System and Graphical User Interface (GUI)	Theoretical lecture	General questions, discussion, and monthly exams.
8	1	Use of Common Icons, Status Bar, Using Menus and Menu Selection.	Operating System and Graphical User Interface (GUI)	Theoretical lecture	General questions, discussion, and monthly exams.
9	1	Concept of Folders and Directories, Opening and Closing Different Windows; Creating Shortcuts.	Operating System and Graphical User Interface (GUI)	Theoretical lecture	General questions, discussion, and monthly exams.
10	1	Customization and Personalization of GUIs, Accessibility Features in GUIs, User Experience (UX).	Operating System and Graphical User Interface (GUI)	Theoretical lecture	General questions, discussion, and monthly exams.
11	1	Word Processing Basics; Basic Features of	Word Processing	Theoretical lecture	General questions, discussion, and monthly exams.

		Word Processors, Opening and Closing Documents.			
12	1	Text Creation and Manipulation; Formatting Text and Paragraphs, Using Templates for Document Creation.	Word Processing	Theoretical lecture	General questions, discussion, and monthly exams.
13	1	Creating and Managing Tables, Utilizing Styles and Themes.	Word Processing	Theoretical lecture	General questions, discussion, and monthly exams.
14	1	Spell Check and Grammar Tools, Using Headers and Footers.	Word Processing	Theoretical lecture	General questions, discussion, and monthly exams.
15	1	Introduction to Spreadsheet Software, Creating and Formatting Worksheets.	Spreadsheets	Theoretical lecture	General questions, discussion, and monthly exams.
16	1	Sorting and Filtering Data, Using Formulas and Functions.	Spreadsheets	Theoretical lecture	General questions, discussion, and monthly exams.
17	1	Using Formulas and Functions, Using Pivot Tables for Data Analysis.	Spreadsheets	Theoretical lecture	General questions, discussion, and monthly exams.
18	1	Data Validation and Error	Spreadsheets	Theoretical lecture	General questions, discussion, and monthly

		Checking, Data Visualization: Creating Charts and Graphs.			exams.
19	1	Introduction to Presentation Software, Overview of Popular Presentation Tools, Creating a New Presentation.	Presentation Software	Theoretical lecture	General questions, discussion, and monthly exams.
20	1	Using Templates and Themes, Inserting and Formatting Text and Images, Transition and Animation Effects.	Presentation Software	Theoretical lecture	General questions, discussion, and monthly exams.
21	1	Using Speaker Notes and Timers, Advanced Features: Hyperlinks and Action Buttons.	Presentation Software	Theoretical lecture	General questions, discussion, and monthly exams.
22	1	Troubleshooting Common Presentation Issues, Future Trends in Presentation Technology.	Presentation Software	Theoretical lecture	General questions, discussion, and monthly exams.

23	1	Computer Networks Basics; LAN, WAN.	Introduction to Internet and Web Browsers	Theoretical lecture	General questions, discussion, and monthly exams.
24	1	Concept of Internet and its Applications; Connecting to the Internet.	Introduction to Internet and Web Browsers	Theoretical lecture	General questions, discussion, and monthly exams.
25	1	World Wide Web; Web Browsing Software, Search Engines.	Introduction to Internet and Web Browsers	Theoretical lecture	General questions, discussion, and monthly exams.
26	1	Understanding URL; Domain Name; IP Address.	Introduction to Internet and Web Browsers	Theoretical lecture	General questions, discussion, and monthly exams.
27	1	Basics of Electronic Mail; Getting an Email Account; Sending and Receiving Emails; Accessing Sent Emails; Using Email; Document Collaboration.	[Communications and Email]	Theoretical lecture	General questions, discussion, and monthly exams.
28	1	Sending and Receiving Emails;	[Communications and Email]	Theoretical lecture	General questions, discussion, and monthly

		Accessing Sent Emails; Using Email; Document Collaboration.			exams.
29	1	Definition of Cloud Computing and its Concept, Cloud-Based Office Suites (Office 365 and Google Workspace).	[Introduction to Cloud Computing and Services]	Theoretical lecture	General questions, discussion, and monthly exams.
30	1	Google Workspace: Google Docs, Google Sheets, Google Drive, Google Meet.	[Introduction to Cloud Computing and Services]	Theoretical lecture	General questions, discussion, and monthly exams.

11.Course Evaluation

Distribution of the 25 marks according to the tasks assigned to the student, such as daily preparation, daily, monthly, and written exams, etc.

12.Learning and Teaching Resources

Recommended supporting books and referen (scientific journals, reports...):	Theses and Dissertations
Electronic references, internet sites:	Electronic Research

13.Curriculum Development Plan

- Familiarity with the latest developments in teaching and learning strategies.
- Using modern technology and scientific reports through illustrative videos to consolidate the scientific material visually.

Course Description Form

1. Course Name:
Computer
2. Course Code:
H016
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2026
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours / 1 unit
7. Course administrator's name (mention all, if more than one name)
Name: kamaran Adil Ibrahim **Email: kamaran_zm@tu.edu.iq**

8. Course Objectives	
Course Objectives	*** Preparing and qualifying specialists to meet the requirements of the labor market in its public and private sectors by diversifying teaching and learning methods and training students to apply acquired knowledge and skills to solve real-world problems.** *** Creating an appropriate climate for students to enable them to apply their acquired knowledge and skills in identifying the needs and problems of society and social matters related to computers and information technology.** *** Providing distinguished academic programs in the field of computers, both theoretical and practical, that are consistent with international standards of academic quality and meet the needs of the labor market.** *** Encouraging and developing scientific research in the fields of computers in general and in the areas of office software suites (Office) in particular.** *** Developing the scientific and technical capabilities in educational laboratories and providing all their requirements.** *** Providing specialized laboratories for scientific research equipped with scientific capabilities to provide an opportunity for teaching staff to develop their abilities.** *** Working to publish scientific and qualitative articles and publications that**

	keep pace **with the information development wheel in the world.** *** Holding specialized scientific conferences.**

9. Teaching and Learning Strategies	
Strategy	Lecture method, laboratory dialogue, discussion, and giving examples.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	What is a network? Types of networks. Basic network components.	Introduction to Computers	Theoretical lecture	General questions, discussion, and monthly exams.
2	1	Basic network components.	Security and Networking	Theoretical lecture	General questions, discussion, and monthly exams.
3	1	Network Security Basics. Understanding network threats. Network Troubleshooting	Security and Networking	Theoretical lecture	General questions, discussion, and monthly exams.
4	1	Introduction to Network Troubleshooting, Common Network Issues and Symptoms, Network Troubleshooting Tools and Utilities.	Security and Networking	Theoretical lecture	General questions, discussion, and monthly exams.
5	1	Using Command- Line Tools for Diagnostics, Identifying and Resolving Connectivity Issues,	Security and Networking	Theoretical lecture	General questions, discussion, and monthly exams.

		Diagnosing Network Performance Problems			
6	1	Electronic banking services this include online banking: ATM and debit card services.	E-Commerce	Theoretical lecture	General questions, discussion, and monthly exams.
7	1	Phone banking, SMS banking, electronic alert, Mobile banking.	E-Commerce	Theoretical lecture	General questions, discussion, and monthly exams.
8	1	Introduction to Computer Troubleshooting, Common Hardware Issues and Solutions, Diagnosing Software Problems.	Computer Troubleshooting	Theoretical lecture	General questions, discussion, and monthly exams.
9	1	Hardware Components: Diagnosis and Repair, Using Safe Mode for Troubleshooting.	Computer Troubleshooting	Theoretical lecture	General questions, discussion, and monthly exams.
10	1	Troubleshooting Operating System Issues, Identifying and Resolving Blue Screen Errors, Dealing with Slow Computer Performance	Computer Troubleshooting	Theoretical lecture	General questions, discussion, and monthly exams.
11	1	Virus and Malware Removal Techniques, Updating	Computer Troubleshooting	Theoretical lecture	General questions, discussion, and monthly exams.

		Drivers and Software.			
12	1	Definition of AI, History of AI, AI Techniques and Approaches.	Introduction to AI	Theoretical lecture	General questions, discussion, and monthly exams.
13	1	Key Characteristics of AI, Benefits of AI, Challenges and Ethical considerations.	Introduction to AI	Theoretical lecture	General questions, discussion, and monthly exams.
14	1	Challenges and Limitations of AI, The Role of Data in AI Systems.	Introduction to AI	Theoretical lecture	General questions, discussion, and monthly exams.
15	1	AI Tools and Frameworks.	Introduction to AI	Theoretical lecture	General questions, discussion, and monthly exams.
16	1	AI-Driven Mobile Technologies, Virtual Assistants (Siri, Google Assistant, Alexa).	The Role of AI in Modern Smartphones	Theoretical lecture	General questions, discussion, and monthly exams.
17	1	Adaptive Learning, Real-Time Translation Services.	The Role of AI in Modern Smartphones	Theoretical lecture	General questions, discussion, and monthly exams.
18	1	The Future of AI in Smartphone Technology, Challenges of Implementing AI in Mobile Devices.	The Role of AI in Modern Smartphones	Theoretical lecture	General questions, discussion, and monthly exams.

19	1	Overview of AI Applications in Various Industries, Education and Healthcare.	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
20	1	Transportation and Advertising.	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
21	1	Finance, Robotics and Automation Technologies..	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
22	1	AI in Marketing: Targeting and Personalization.	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
23	1	AI in Image and Video Analysis, Smart Cities	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
24	1	Future Trends in AI Applications and Tools.	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
25	1	Introduction to AI and Its Societal Impact, The Role of AI in Enhancing Public Safety.	AI and Society	Theoretical lecture	General questions, discussion, and monthly exams.
26	1	Cultural Perspectives on AI Adoption, AI	AI and Society	Theoretical lecture	General questions, discussion,

		and Governance: Policy Implications			and monthly exams.
27	1	Introduction to Ethics in AI, Transparency and Explainability of AI Systems, Privacy Concerns in AI Data Usage.	**Ethical Challenges in AI**	Theoretical lecture	General questions, discussion, and monthly exams.
28	1	The Ethical Implications of Autonomous Systems, Ethics in AI-Driven Marketing and Advertising	Ethical Challenges in AI	Theoretical lecture	General questions, discussion, and monthly exams.
29	1	Ethical Considerations in Education, Human Rights and AI Implementation	Ethical Challenges in AI	Theoretical lecture	General questions, discussion, and monthly exams.
30	1	Future trends in AI, recent research and emerging technologies.	The Future of AI	Theoretical lecture	General questions, discussion, and monthly exams.

11.Course Evaluation

Distribution of the 25 marks according to the tasks assigned to the student, such as daily preparation, daily, monthly, and written exams, etc.

12.Learning and Teaching Resources

Recommended supporting books and referen (scientific journals, reports...):	Theses and Dissertations
Electronic references, internet sites:	Electronic Research

13.Curriculum Development Plan
• Familiarity with the latest developments in teaching and learning strategies. • Using modern technology and scientific reports through illustrative videos to consolidate the scientific material visually.

Course Description Form

1. Course Name:
English\ second stage
2. Course Code:
UOB110
3. Semester / Year:
annual
4. Description Preparation Date:
2005-2006
5. Available Attendance Forms:
Daily
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours\ 2unit
7. Course administrator's name (mention all, if more than one name)
Name: Nooray A. Hameed **Email:** nooray.a.hameed@tu.edu.iq
8. Course Objectives

Course Objectives	1-Students will acquire knowledge, concepts, and attitudes in speaking English fluently. -2. It will facilitate the understanding of concepts. -3. It will showcase students' diverse talents.
9. Teaching and Learning Strategies	
Strategy	1. Readings, self-learning, and discussion groups. 2. Interaction and participation in the lesson. 3. Assigning exercises and homework. 4. Guiding students to useful websites.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or Subject name**	**Learning Method**	**Evaluation Method**
1	1	Students are able to introduce themselves, gives greetings and a Simple Questions	Getting to Know You: Introductions & Greetings	Theoretical	Discussion
2	1	Students are able to use the simple present tense to talk about daily routines	Getting to Know You: Gramma Present Simple	Theoretical	Discussion
3	1	Students are able to describe their daily life and routine	The Way We Live: Daily Life	Theoretical	Discussion
4	1	Students are able to use the terminology of daily activities and temporal expressions	The Way We Live: Vocabulary – Daily Activities	Theoretical	Discussion
5	1	Students are able to recount past events and use the simple past	It All Went Wrong: Mistakes and Funny Situations	Theoretical	Discussion
6	1	Students are able to phrase sentences correctly to talk about the past	It All Went Wrong: Grammar – Past Simple	Theoretical	Discussion
7	1	Students are able to order products, describe things, and purchase	Let's Go Shopping: Shopping and buying	Theoretical	Discussion

8	1	Students are able to use shopping vocabulary and prices	Let’s Go Shopping: Vocabulary – Shopping & Prices	Theoretical	Discussion
9	1	Students are able to talk about hobbies and future plans	What Do You Want to Do?: Interests and Plans	Theoretical	Discussion
10	1	Students are able to use the simple future to express plans	What Do You Want to Do?: Grammar – Future Simple	Theoretical	Discussion
11	1	Students are able to describe places and emotions using adjectives	Tell Me! What’s It Like?: Describing Places and Experiences	Theoretical	Discussion
12	1	Students are able to express an opinion and compare things	Tell Me! What’s It Like?: Vocabulary – Adjectives & Opinions	Theoretical	Discussion
13	1	Students are able to narrate information about celebrities and express their opinion	Fame: Talking about Celebrities	Theoretical	Discussion
14	1	Students are able to use comparisons and preference in talking about people	Fame: Grammar – Comparatives & Superlatives	Theoretical	Discussion
15	1	Assessing students' understanding of the first semesters and acquiring basic language skills	Exam	Theoretical	Discussion

16	1	Students are able to use the vocabulary of history and culture in speech	Living History: Historical Events	Theoretical	Discussion
17	1	Students are able to narrate sequential events and connect ideas	Living History: Vocabulary – History & Culture	Theoretical	Discussion
18	1	Students are able to use the continuous past to describe current events in the past	Time for a Story: Storytelling	Theoretical	Discussion
19	1	Students are able to describe modern media and communication	Time for a Story: Grammar – Past Continuous	Theoretical	Discussion
20	1	Students are able to use internet terminology and modern devices	Our Interactive World: Technology & Social Interaction	Theoretical	Discussion
21	1	Students are able to describe innovations, changes, and their impact on life	Our Interactive World: Vocabulary – Media & Technology	Theoretical	Discussion
22	1	Students are able to use the present tense to express experiences and changes	What's Changed the World?: Innovations & Changes	Theoretical	Discussion
23	1	Students are able to formulate questions and discuss different topics	What's Changed the World?: Grammar – Present Perfect	Theoretical	Discussion

24	1	Students are able to use the vocabulary and tools of the question correctly	Just Wondering …: Asking Questions	Theoretical	Discussion
25	1	Students are able to describe occupations, daily tasks, and work-related places	Just Wondering …: Vocabulary – Question Words & Expressions	Theoretical	Discussion
26	1	Students are able to merge the present and past tense to talk about practical experiences	The Way I Earn a Living: Jobs & Work	Theoretical	Discussion
27	1	Students are able to describe family members and social connections	The Way I Earn a Living: Grammar – Present & Past Simple	Theoretical	Discussion
28	1	Students are able to use family vocabulary and relationships in conversation and book	Family Ties: Family Relationships	Theoretical	Discussion
29	1	Students are able to describe historical events and determine the chronology	Family Ties: Vocabulary – Family & Relationships	Theoretical	Discussion
30	1	Final assessment of listening, speaking, reading and writing skills	Living History: Historical Events	Theoretical	Discussion

Course Evaluation	
1. The first semester exam is divided into a monthly exam + a daily exam (25 marks) 2. The second semester exam is divided into a monthly exam + a daily exam (25 marks). 3. Final exam (50 marks)	
12: Learning and Teaching Resources	
Required Textbooks (Methodology, if any)	Headway– pre–intermediate
Main References (Sources)	How Languages are Learned Teaching by Principles Principles of Language Learning and Teaching TESOL Quarterly ELT Journal Applied Linguistics British Council
Recommended books and references (Scientific journals, reports...)	ERIC Google Scholar ResearchGate JSTOR ScienceDirect

Course Description Form

1. Course Information
Human Rights and Democracy
2. Course Code
107
3. Semester / Year: Annual
2026−2025
4. Date of Preparation:
2025-11-20
5. Attendance Form
In-person (Mandatory)
6. Total Credit Hours / Units:
60 Hours / 2 Units
7. Course Coordinator:
Asst. Lect. Nihad abdullah mahmood nihad.A.mahmood@tu.edu.iq
8. Course Objectives

• Preparing a conscious generation aware of human rights and public freedoms. • Developing cultural levels and increasing student awareness. • Keeping students updated with other nations' experiences in human rights. • Familiarizing students with key international conventions, treaties, and instruments. • Informing students about constitutional articles guaranteeing rights and freedoms. • Educating students on their rights, freedoms, protection methods, and limits. • Understanding the role of education in spreading the culture of democracy and good governance.	**Course objectives**

• Encouraging active participation in governance through free and fair elections. • Developing analytical and critical skills regarding the future of human rights.	

9. and Learning Strategies

• Direct lecture delivery method. • Student groups and collaborative learning. • Workshops. • Reports and research studies. • Use of illustrative aids and visual tools. • Attendance and physical presence tracking. • Role-playing strategies within the classroom. • Writing analytical papers related to human rights and democracy topics.	**Teaching**

10. Course Structure (Weekly Plan)

Assessment Method	Teaching Method	Unit/Topic Title	Learning Outcomes	Hours	Week
Q&A	Q&A	Concept of Human Rights and the International Bill of Rights	Concept & Importance	2	1
Oral Questions	Oral Questions	Human Rights Definition and National Implementation Mechanisms	Concept & Importance	2	2

Daily Quiz	Daily Quiz	Concept of the International Bill of Human Rights	Concept & Importance	2	3
Q&A	Q&A	Categorical and Special Rights	Concept & Importance	2	4
Written Exam	Written Exam	Rights of Women, Children, Minorities, and Persons with Disabilities	Concept & Importance	2	5
Q&A	Q&A	National Procedures for Implementing Special or Categorical Rights	Concept & Importance	2	6
Interrogation	Interrogation	Grave Violations of Human Rights	Concept & Importance	2	7
Discussion	Discussion	Combating Grave Violations of Human Rights	Concept & Importance	2	8
Interrogation	Interrogation	International Humanitarian Law & Human Rights in Conflict	Concept & Importance	2	9
Q&A	Q&A	Grave Violations of Human Rights in Iraq	Concept & Importance	2	10
Q&A	Q&A	Human Rights Council & Universal Periodic Review (UPR)	Concept & Importance	2	11

Oral Questions	Oral Questions	International/Regional Protection Mechanisms & Accountability	Concept & Importance	2	12
Daily Quiz	Daily Quiz	Contemporary Challenges in Human Rights	Concept & Importance	2	13
Q&A	Q&A	Challenges Facing Human Rights	Concept & Importance	2	14
Written Exam	Written Exam	National and Procedural Mechanisms to Enhance Rights	Concept & Importance	2	15
Q&A	Q&A	Democracy: Historical Origins and Evolutionary Path	Concept & Importance	2	16
Interrogation	Interrogation	Historical Concepts of Democracy's Emergence & Foundations	Concept & Importance	2	17
Discussion	Discussion	Evolution of Democracy in the Modern Era and its Correlates	Concept & Importance	2	18
Interrogation	Interrogation	Democracy in the 20th Century: Totalitarianism vs. Expansion	Concept & Importance	2	19
Q&A	Q&A	Patterns of Democracy in Contemporary Contexts	Concept & Importance	2	20

Q&A	Q&A	Islam and Democracy	Concept & Importance	2	21
Oral Questions	Oral Questions	Institutions and Mechanisms of Democracy	Concept & Importance	2	22
Daily Quiz	Daily Quiz	Separation of Powers and Democratic Governance Principles	Concept & Importance	2	23
Q&A	Q&A	Elections as a Mechanism for Democracy	Concept & Importance	2	24
Written Exam	Written Exam	Political Parties	Concept & Importance	2	25
Q&A	Q&A	Civil Society and Pressure Groups	Concept & Importance	2	26
Interrogation	Interrogation	Relations between Democracy and Public Movements	Concept & Importance	2	27
Discussion	Discussion	Guarantees of Rights and Freedoms in Democratic Systems	Concept & Importance	2	28
Interrogation	Interrogation	Media and Democracy	Concept & Importance	2	29
Q&A	Q&A	Democratic Systems and Comparative Studies	Concept & Importance	2	30

Q&A	Q&A	Democracy in the Developing World: Challenges & Models	Concept & Importance	2	31
Oral Questions	Oral Questions	Digital Transformation in Democratic Practice	Concept & Importance	2	32
Daily Quiz	Daily Quiz	The Democratic Experience in Iraq after 2003	Concept & Importance	2	33
Q&A	Q&A	Civil Society and Pressure Groups (Continued)	Concept & Importance	2	34

11. Course Evaluation

1. First Semester Exam: Monthly Exam + Daily Quiz (25 Degrees)
2. Second Semester Exam: Monthly Exam + Daily Quiz (25 Degrees)
3. Final Exam: (25 Degrees)

Learning and Teaching Resources

Human Rights and Democracy: A Curriculum for First-Year Students in Iraqi Universities.	Required Textbook
Dr. Musaddaq Adel Talib, Dr. Adnan Aajel Obaid, Dr. Ayat Salman Shuhaib, Dr. Mohammed Oudah Mohsen, Dr. Abbas Atiyah Abdul Al-Quraishi: Human .Rights Curriculum	Main References
Dr. Muntaser Majeed Hameed, Dr. Yasser Ali Ibrahim, Dr. Kadhim Ali Mahdi, Dr. Ahmed Yahya Hadi, Dr. Ihsan Mohammed Hadi, Dr. Anwar Saeed Jawad: .Democracy Curriculum	Supporting References

Course Description Form

1. Course Information
Human Rights and Democracy
2. Course Code
107
3. Semester / Year: Annual
2025-2026
4. Date of Preparation:
20-11-2025
5. Attendance Form
In-person (Mandatory)
6. Total Credit Hours / Units:
60 Hours / 2 Units
7. Course Coordinator:
Asst. Lect. Nihad abdullah mahmood nihad.A.mahmood@tu.edu.iq
8. Course Objectives

Course objectives	▪ Preparing a conscious generation aware of human rights and public freedoms. ▪ Developing cultural levels and increasing student awareness. ▪ Keeping students updated with other nations' experiences in human rights. ▪ Familiarizing students with key international conventions, treaties, and instruments. ▪ Informing students about constitutional articles guaranteeing rights and freedoms. ▪ Educating students on their rights, freedoms, protection methods, and limits. ▪ Understanding the role of education in spreading the culture of democracy and good governance. ▪ Encouraging active participation in governance through free and fair elections.

	▪ Developing analytical and critical skills regarding the future of human rights.

9. and Learning Strategies

Teaching	▪ Direct lecture delivery method. ▪ Student groups and collaborative learning. ▪ Workshops. ▪ Reports and research studies. ▪ Use of illustrative aids and visual tools. ▪ Attendance and physical presence tracking. ▪ Role-playing strategies within the classroom. ▪ Writing analytical papers related to human rights and democracy topics.

10. Course Structure (Weekly Plan(

Week	Hours	Learning Outcomes	Unit/Topic Title	Teaching Method	Assessment Method
1	2	& Concept Importance	Concept of Human Rights and the International Bill of Rights	Q&A	Q&A
2	2	& Concept Importance	Human Rights Definition and National Implementation Mechanisms	Oral Questions	Oral Questions
3	2	& Concept Importance	Concept of the International Bill of Human Rights	Daily Quiz	Daily Quiz

4	2	& Concept Importance	Categorical and Special Rights	Q&A	Q&A
5	2	& Concept Importance	,Rights of Women Children, Minorities, and Persons with Disabilities	Written Exam	Written Exam
6	2	& Concept Importance	National Procedures for Implementing Special or Categorical Rights	Q&A	Q&A
7	2	& Concept Importance	Grave Violations of Human Rights	Interrogation	Interrogation
8	2	& Concept Importance	Combating Grave Violations of Human Rights	Discussion	Discussion
9	2	& Concept Importance	International & Humanitarian Law Human Rights in Conflict	Interrogation	Interrogation
10	2	& Concept Importance	Grave Violations of Human Rights in Iraq	Q&A	Q&A
11	2	& Concept Importance	Human Rights Council Universal Periodic & (Review (UPR	Q&A	Q&A
12	2	& Concept Importance	International/Regional Protection Mechanisms Accountability &	Oral Questions	Oral Questions

13	2	& Concept Importance	Contemporary Challenges in Human Rights	Daily Quiz	Daily Quiz
14	2	& Concept Importance	Challenges Facing Human Rights	Q&A	Q&A
15	2	& Concept Importance	National and Procedural Mechanisms to Enhance Rights	Written Exam	Written Exam
16	2	& Concept Importance	Democracy: Historical Origins and Evolutionary Path	Q&A	Q&A
17	2	& Concept Importance	Historical Concepts of Democracy's Emergence Foundations &	Interrogation	Interrogation
18	2	& Concept Importance	Evolution of Democracy in the Modern Era and its Correlates	Discussion	Discussion
19	2	& Concept Importance	Democracy in the 20th Century: Totalitarianism vs. Expansion	Interrogation	Interrogation
20	2	& Concept Importance	Patterns of Democracy in Contemporary Contexts	Q&A	Q&A
21	2	& Concept Importance	Islam and Democracy	Q&A	Q&A
22	2	& Concept	Institutions and Mechanisms of	Oral	Oral Questions

		Importance	Democracy	Questions	
23	2	& Concept Importance	Separation of Powers and Democratic Governance Principles	Daily Quiz	Daily Quiz
24	2	& Concept Importance	Elections as a Mechanism for Democracy	Q&A	Q&A
25	2	& Concept Importance	Political Parties	Written Exam	Written Exam
26	2	& Concept Importance	Civil Society and Pressure Groups	Q&A	Q&A
27	2	& Concept Importance	Relations between Democracy and Public Movements	Interrogation	Interrogation
28	2	& Concept Importance	Guarantees of Rights and Freedoms in Democratic Systems	Discussion	Discussion
29	2	& Concept Importance	Media and Democracy	Interrogation	Interrogation
30	2	& Concept Importance	Democratic Systems and Comparative Studies	Q&A	Q&A
31	2	& Concept Importance	Democracy in the :Developing World Challenges & Models	Q&A	Q&A

32	2	& Concept Importance	Digital Transformation in Democratic Practice	Oral Questions	Oral Questions
33	2	& Concept Importance	The Democratic Experience in Iraq after 2003	Daily Quiz	Daily Quiz
34	2	& Concept Importance	Civil Society and Pressure Groups (Continued)	Q&A	Q&A

11.Course Evaluation

1. First Semester Exam: Monthly Exam + Daily Quiz (25 Degrees)
2. Second Semester Exam: Monthly Exam + Daily Quiz (25 Degrees)
3. Final Exam: (25 Degrees)

Learning and Teaching Resources

Required Textbook	Human Rights and Democracy: A Curriculum for First-Year Students in Iraqi .Universities
Main References	,Dr. Musaddaq Adel Talib, Dr. Adnan Aajel Obaid, Dr. Ayat Salman Shuhaib Dr. Mohammed Oudah Mohsen, Dr. Abbas Atiyah Abdul Al-Quraishi: Human .Rights Curriculum
Supporting References	,Dr. Muntaser Majeed Hameed, Dr. Yasser Ali Ibrahim, Dr. Kadhim Ali Mahdi :Dr. Ahmed Yahya Hadi, Dr. Ihsan Mohammed Hadi, Dr. Anwar Saeed Jawad .Democracy Curriculum

Course Description Form

2. Course Name:		1.
Biochemistry		
4. Course Code:		3.
6. Chapter/Year:		5.
Annual		
8. Date this description was prepared		7.
2026/1/12		
10. Available Attendance Forms:		9.
Attending Lectures		
12. Number of Hours (Total) / Number of Units (Total):		11.
1 Theoretical + 2 Practical Hours		
14. Course administrator name (if more than one name mentioned)		13.
Mateen A. Mehdi Mateen.a.mehdi@tu.edu.iq		
16. Course Objectives		15.
	• Learns buffer solutions and their role in biological reactions – the role of the cell. • Understand the role, structure, and function of the main sources of energy in the body (carbohydrates, fats, and proteins). • Understand the role and function (enzymes, hormones, nucleic acids, vitamins) within the body. • Understanding the relationship between energy sources	•
18. Teaching and Learning Strategies		17.
	Theoretical Lectures, Practical Application, Lectures Electronic, Daily Exams, Monthly Exams.	
20. Course Structure		19.

Evaluation Method	Learning method		Unit Name or Subject	Required Learning Outcomes	Watches	The week
Daily exams and monthly	Lecture		Biomolecules Mission and Buffer Solutio	Analysis, Application, Understanding	1Theoretical 2 Practical	First week Second week
Daily and Monthly Exams	Lecture		Carbohydrates Know it - its functions and structures	Analyze, Apply Understand	1 Theoretical 2 Practical	Third week fourth week
Daily and Monthly Exams	Lecture		Varieties All Carbohydra	Analyze, Apply Understand	1 Theoretical 2 Practical	Fifth week Six Week
Daily and Monthly Exams	Lecture		Amino acids - their definition - properties - and their types	Analyze, Apply Understand	1 Theoretical 2 Practical	Seventh week eighth week
Daily and Monthly Exams	Lecture		Peptides and proteins	Analyze, Apply Understand	1 Theoretical 2 Practical	Week Ninth Tenth week

Daily and Monthly Exams	Lecture		Fats Definition, Types and Functions	Analyze, Apply Understand	1 Theoretical 2 Practical	Week Eleven Twelfth week
Daily and Monthly Exams	Lecture		Enzymes Defin by Categories Factors Theorie	Analyze, Apply Understand	1 Theoretical 2 Practical	Thirteenth we fourteenth we
Daily and Monthly Exams	Lecture		Nucleic acids Definition – Composition Its function and its vital role	Analyze, Apply Understand	1 Theoretical 2 Practical	week fifteen week sixteen
Daily and Monthly Exams	Lecture		Hormones - Methods of Measurement - Function - and Detection	Analyze, Apply Understand	1 Theoretical 2 Practical	week seventee week eighteen
Daily and Monthly Exams	Lecture		Types of hormones and their regulatory role	Analyze, Apply Understand	1 Theoretical 2 Practical	Week Nineteen Twentieth we
Daily and Monthl	Lecture		Vitamins – thei definition, function, types, and diseases	Analyze, Apply Understand	1 Theoretical 2 Practical	The twentiet h week Week 22

y Exams			resulting from their deficiency			

22. Course Evaluation	21.
Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports... etc.	

24. Learning and Teaching Resources		23.
Introduction to Biochemistry Dr. Khawla Al Falih	Required Textbooks (Methodology, if any)	
Principles of Lingerie Biochemi	Main References (Sources)	
Journals specialized in biochemi and books in the field biochemistry	Recommended books and references (scientific journals, reports…)	
Google scholar , NCBI, MCQ in Biochemistry , Lehninger principles of biochemistry Harpers illustrated Biochemistry	Electronic References, Websites	

Course description form

.1 **Course Name:**	
General chemistry theory	
.2 **Course Code**	
104 BGC	
.3 **Term/Year: Annual**	
Annual	
.4 **Date this description was prepared**	
2025-2026	
.5 **Available forms of attendance:**	
Daily	
.6 **Total study hours / Total number of units:**	
hour 60	
.7 **Name of the course coordinator (if there is more than one name mention it).**	
the name:Ahmed Abdul Hussein Qanbar **Email: ahmed.abd.tuz.@tu.edu.iq**	
.8 **Course Objectives**	
1. Explaining the concept of chemistry **2. Explaining mathematical problems related to expressing concentrations** **33. Providing a detailed explanation of organic chemistry with sufficient examples of chemical equations to illustrate single, double, and triple bonds**	
.9 **Teaching and learning strategies**	
1- Direct explanation and lecturing, using the board to solve mathematical problems, followed by student discussion of the problems through: **Student participation in solving mathematical problems on the board during the explanation of the scientific material.** **3- Discussion of some chemical terms with the students.**	**1-**

.10 **Course Structure**

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	week

1	2	Introducing the student to the science of chemistry		blackboard	Daily quizzes with participation in solving math problems on the board

11. Course Evaluation	
Midterm and final exams Daily quizzes and student participation in questions posed during class	
12. Learning and teaching resources	
Required textbooks (methodology, if applicable)	
Main references (sources)	ssistant Professor Dr. Elham Nghimish azal Hussein, Analytical Chemistry for First-Year Students Dr. Layla S. Al-Omran, Department of nemistry, College of Science, University of Basrah
Recommended supporting books and references (scientific journals, reports...)	Concise Guide to Solving Quantitative Analytical Chemical Problems by ofessor Dr. Munther Salim Abdul Latif
Electronic references, websites	Organic Chemistry for First-Year Students, Prof. Dr. Abdullah Hussein Kashash

Course Description Form

1. Course name:	
General Chemistry Practical	
2. Course code:	
104BGC	
3. Semester/Year: Annual	
Annual	
4. Date this description was prepared	
2025/11/1	
5. Available attendance forms:	
Daily	
6. Number of study hours (total) / Number of units (total):	
60 hours / 4 unit	
7. Name of the course administrator (if more than one name is mentioned)	
the name: Haider Mahdi Ahmed Email:haider.m.ahmed@tu.edu.iq	
8. Course objectives	
	1- Understand and comprehend the material General Chemistry Practical. 2- Dealing with Chemical experiments in the field of analytical and organic. 3- Understanding methods and techniques To prepare standard solutions solid and liquid substances

9. Teaching and learning strategies	
	1- Explaining the scientific material to students in detail. **2- Student participation in Work to prepare standard solutions in analytical and organic chemistry** **3- Discussion and dialogue on vocabulary related to the topic.**

Course structure ١٠.

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
Daily exams And homework In addition to Exams Monthly	The blackboard What is your data?	Terminology for some laboratory tools and glassware used in experiments	Introducing the student to some laboratory tools and glassware	2	١
=	=	Introduction to Chemistry Membership	Student definition In organic chemistry Its importance in our lives	2	٢
=	=	Crystallization	Student definition of crystallization	2	٣
=	=	melting point	Student definition Melting point	2	٤
=	=	And boiling	Student definition boiling	2	٥

=	=	Distillation and its types	Introducing the student to distillation and explaining it Its types	2	٦
=	=	Extraction	Introducing the student to extraction	2	٧
=	=	Aspirin preparation	Detailed explanation of how Aspirin preparation	2	٨
=	=	eparation of salicylic acid from aspirin	Detailed explanation of how Preparation of salicylic acid aspirin	2	٩
=	=	Acid hydrolysis of acetylsalicylic acid	Detailed explanation of decomposition acidic water acid Acetylsalicylate	2	١٠
=	=	Alcohol detection	Student definition of Alcohol Tests	2	١١
=	=	Detection of aldehydes	Student definition of aldehyde detection	2	١٢
=	=	Ketone detection	Student definition of statements Ketones	2	١٣
=	=	Introduction to Chemistry Analytical	Introducing the student to chemistry Analytical and its types	2	١٤

=	=	Correction	Introducing the student to correction	2	١٥
=	=	Methods of expressing solution concentrations in analysis and quantitative calculations related to volumetric analysis	Introducing the student to volumetric analysis	2	١٦
=	=	Prepare a solution of a solid substance of sodium chloride salt at a concentration of 0.5 M and size 500 ml	Detailed explanation of how to prepare Standard solution of a solid	2	١٧
=	=	Prepare a solution of a liquid substance of concentrated hydrochloric acid at a concentration of 0.12 N and 250 ml volume	Detailed explanation of how Preparing a standard solution of a liquid substance	2	١٨
=	=	Volumetric analysis reactions	Student definition Volumetric analysis reactions	2	١٩
=	=	Prepare a solution0.1 N of hydrochloric acid and titrate it with a standard solution of carbonate. Sodium	Detailed explanation of how Hydrochloric preparation And calibrate it with a solution Standard carbonate Sodium	2	٢٠

=	=	Prepare a solution0.1 N of NaOH and its comparison with a standard solution of HCl	etailed explanation of how Hydroxide preparation Sodium from solution Standard Hydrochloric	2	٢١
=	=	Complex formation reactions	Introducing the student to interactions Complex Formation	2	٢٢
=	=	Set vinegar quality	Student definition of appointment Vinegar quality	2	٢٣
=	=	Estimation of water hardness	Student definition of appreciation Hardness in water	2	٢٤

١١. Course Evaluation

1. **Daily tests with multiple choice questions that require scientific skills.**
2. **Participation scores for competition questions for academic topics**
3. **Grading homework**
4. **Practical tests**
5. **Reports and studies**

١٢. Learning and teaching resources

	Required Textbooks (Methodology if any)
1.Skoog DA, West DM, Holler FJ and Crouch SR 2013. Fundamentals of analytical chemistry, Nelson Education. **2.John H. Kennedy1991. Fundamentals of Practical Analytical Chemistry. Translated by Sarmed Bahjat Dikran and NabilAdel Fakhry. University of Salahaddin.** **3.March's 2007 Advanced Organic Chemistry: Reactions, Mechanisms, and Structure, Sixth Edition (March's Advanced Organic Chemistry) P.2,377.** **4.Hanan Abdel Jalil Rady, Mohamed Ahmed Abdel.2004 Practical Organic Chemistry. University of Basra**	**Main References (Sources)**
WWW.chemicalprocessing.com	**Recommended supporting books and references (scientific journals, reports, etc.)**
https://learnchemistry12.com/	**Electronic ferences, websites**

نموذج وصف المقرر

1. اسم المقرر:	
تشريح النبات	
2. رمز المقرر:103BPA	
3. 103BPA	
4. الفصل / السنة:	
السنوي	
5. تاريخ إعداد هذا الوصف 28/3/2026	
10/10/2024	
6. أشكال الحضور المتاحة:	
الحضور اليومي	
7. عدد الساعات الدراسية (الكلي)/ عدد الوحدات (الكلي):	
30 ساعة	
8. اسم مسؤول المقرر الدراسي (اذا اكثر من اسم يذكر)	
الاسم: أ.م.د. احسان عبد العزيز عبد الرحيم الايميل:ihsan.abdulazez@tu.edu.iq	
9. اهداف المقرر	
تعريف الطلبة بمادة تشريح النبات الخلية ومحتوياتها الحية والغير حية النقر النسيج البارنكيمي النسيج الكولونكيمي النسيج السكلرنكيمي الأنسجة الدائمة نظريات القمة النامية نسيج الخشب نسيج اللحاء النباتات المائية النباتات الصحراوية	
10. استراتيجيات التعليم والتعلم	
الأهداف المعرفية	١ـ ما هو تعريف تشريح النبات ٢ـ ما هي أنواع الأنسجة النباتية ٣ـ ما هي فوائد كل نسيج للنبات ٤ـ اجزاء كل نسيج نباتي

الأهداف المهارية الخاصة بالمقرر	٥- المحتويات الحية والغير حية داخل الخلية النباتية ١- ان يتعلم الطالب تشريح النبات ٢- ان يتعلم الطالب التعرف على الأجزاء النباتية الداخلية ٣ تكليف الطالب بعمل سلايدات لكل جزء نباتي ١- تمكين الطلبة المعرفة العلمية والعملية ٢- تمكين الطلبة من الإجابة على الاسئلة
الأهداف الوجدانية والقيمة	1- تكليف الطلبة بعمل تقارير عن الادة 2- تكليف االطلبة بالحصول على بيانات علمية من مص خارجية 3- تعليم الطلبة على الاجابة على الاسئلة المتعلقة بالمادة

11. بنية المقرر

الأسبوع	الساعات	مخرجات التعلم المطلوبة	اسم الوحدة او الموضوع	طريقة التعلم	طريقة التقييم
1-2	2	الخلية النباتية	الخلية النباتية	المحاضرة والمناقشة	السؤال والجواب
3-4	2	المحتويات الحية داخل الخلية			
6-5	2	المحتويات الغير حية داخل الخلية النباتية	مكونات الخلية النباتية	المحاضرة والمناقشة	السؤال والجواب
8-7	2	النسيج البارنكيمي	الانسجة النباتية	المحاضرة والمناقشة	لسؤال والجواب
10-9	2	النسيج الكولنكيمي	الانسجة النباتية	المحاضرة والمناقشة	السؤال والجواب
12-11	2	النسيج السكلرنكيمي	الانسجة النباتية	المحاضرة والمناقشة	السؤال والجواب
14-13	2	نظريات القمة النامية	الانسجة النباتية	المحاضرة والمناقشة	السؤال والجواب

16-15	2	الكامبيوم الفليني	الانسجة النباتية	المحاضرة والمناقشة	السؤال والجواب
18-17	2	النسيج الفليني اجزاءه	الانسجة النباتية	المحاضرة والمناقشة	السؤال الجواب
20-19	2	نسيج الخشب	الانسجة النباتية	المحاضرة و المناقشة	السؤال والجواب
22-21	2	نسيج الخشب بالتفصيل(النباتات ذوات الفلقة الواحد والفلقتين)	الانسجة النباتية	المحاضرة و المناقشة	السؤال و الجواب
24-23	2	نسيج اللحاء	الانسجة النباتية	المحاضرة و المناقشة	السؤال والجواب
26-25	2	الجذر	الانسجة النباتية	المحاضرة و المناقشة	السؤال والجواب
28-27		الورقة النباتية +الساق	الانسجة النباتية	المحاضرة	السؤال والجواب
30-29		النباتات الصحراوية	الانسجة النباتية	المحاضرة	السؤال والجواب

12. تقييم المقرر

الامتحان اليومي والامتحان الشهري

13. مصادر التعلم والتدريس	
الكتب المقررة المطلوبة (المنهجية أن وجدت)	المحاضرات مطبوعة
المراجع الرئيسة (المصادر)	المصادر
الكتب والمراجع الساندة التي يوصى بها (المجلات العلمية، التقارير....)	المجلات العلمية
المراجع الإلكترونية ، مواقع الانترنيت	مواقع الانترنيت

Course description form

1. Course Name	
Practical Biochemistry	
2. Course code:	
219BBI	
3. Term/Year:	
Annual	
4. This description was prepared at the beginning of the academic year.	
2026-2025	
5. Available forms of attendance:	
The presence	
6. Total study hours / Total number of units:	
hours	
7. Name of the course coordinator (if there is more than one, mention it)/	
Ahmed Abdul Hussein Qanbar Email:ahmed.abd.tuz@tu.edu.iq	
8. Course Objectives	
	1. Carbohydrates: Identifying the different types of carbohydrate reactions. **2. Fats: Identifying the types of fats (saturated, unsaturated).** **3. Proteins: Identifying proteins and their types (simple, complex).** **4. Enzymes: Understanding the nature of enzymes and their role as catalysts for biochemical reactions.**
9. Teaching and learning strategies	
gnitive objectives	Carbohydrates: Students will learn about their importance in detecting polysaccharides. Lipids: Students will explain the role of lipids in saponification reactions and in tests for fatty acids. Proteins: Students will explain the role of roteins in detecting amino acids. Enzymes: Students will learn about the nature of nzymes and their biological activity. Carbohydrates: Students will pay attention to observing color changes during experiments and handle chemicals carefully.
Affective and value-based objectives.	Students will develop a sense of responsibility when measuring samples and analyzing results. ppreciate the importance of carbohydrates in daily life and the energy they provide to the body.

2. Fats

Respect the steps of the experiment and avoid rushing to prevent errors.

Appreciate the role of fats in nutrition and health by observing their practical properties.

Develop patience and attentiveness while conducting fat detection tests.

3. Proteins

Pay close attention to changes in color and clumping during tests.

Develop an understanding of the importance of protein in building and maintaining the body and tissues.

Respect safety rules when handling chemicals.

4. Enzymes

Develop scientific curiosity to understand how enzymes work in the body and in food.

Pay attention to recording results and accurately observing the effect of different factors on enzyme activity.

Develop a sense of responsibility for conducting scientific experiments correctly and objectively.

Course Structure .10

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	week
Delivering the lecture directly and discussing it practically, if the materials for the subject to be revealed are available.	The whiteboard is used to illustrate important points, whether through drawings or diagrams.	Carbohydrates	define carbohydrates. To list the types of carbohydrates. To list the reactions of carbohydrates with non-oxidizing acids. To explain carbohydrate detection methods such as the Müllerian, Biel, and Silvanov tests. To demonstrate the reactions of aldehyde and ketone groups and the detection of polysaccharides, such as starch hydrolysis and blood glucose analysis.		
=	=	Lipeds	It provides a scientifically accurate definition of fats. It explains the different types of fats.		

			It demonstrates the analysis of fatty acids. It explains how soap reacts. It demonstrates the analysis of cholesterol and blood lipids.		
=	=	Proteins	To identify and classify the types of amino acids. To demonstrate the detection of amino acids, chromatography, and methods of protein precipitation.		
=	=	Enzymes	Define enzymes scientifically and correctly. List the types of enzymes and their basic functions. Explain the nature of an enzyme, such as catalase, and its biological activity.		
Course Assessment Methods .11					
Written tests: Multiple-choice, true/false, and short-answer questions. **Practical projects: Such as creating a balanced daily meal plan.**					

Practical observations: Observing the student's ability to classify foods and apply knowledge practically.	
Learning and teaching resources .12	
Lectures are printed	Required textbooks (methodology, if applicable)
Dr. Sami Al-Mudhaffar	Physiological biochemistry
Dr. Talal Al-Najafi	Biochemistry book
Dr. Khawla Al-Faleh	Introduction to Biochemistry
Lippincott biochemistry	External sources
Lehninger pinciples of biochemistry	

Subject Teacher: Assistant Teacher Ahmed Abdel-Haybin Qanbar

1. Program Vision

The vision of the Department of Life Sciences is to prepare an aware generation capable of keeping pace with scientific developments in all areas of life in general and physics in particular. Since its establishment, this department has worked to graduate educational and teaching staff with a high level of efficiency and practical experience.

2. Program Mission

The mission of the Life Sciences Department is educational and scientific, working to raise scientific generations capable of keeping pace with scientific developments in various cultural fields. Its highest mission is to provide the competent professor who keeps pace with his reality and keeps pace with it with a spirit keen on knowledge and learning.

3. Program Objectives

- Preparing highly skilled male and female teachers.
- Preparing a generation of distinguished researchers in life sciences.
- Serving the community by providing life sciences information.
- Developing faculty members scientifically and culturally.
- Explaining the great importance of life sciences and its role in society.

4. Program Accreditation

Nothing

5. Other external influences

Many holidays in the school year

6. Program Structure

Program Structure	Number of Courses	Credit hours	Percentage	Reviews*
Institution Requirements	5	10	50%	
College Requirements	2	6	20%	
Department Requirements	52	24	50%	
Summer Training				
Other				

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

7. Program Description

Year/Level	Course Code	Course Name	Credit Hours	
			theoretical	practical
First	101BGB	General Biology	**2**	**2**
	102BCB	Cell Biology	2	2
	103BPA	Plant Anatomy	2	2
	104BGC	General Chemistry	1	2
	105AL	Arabic Language	1	–
	106EP	Developmental and Educational Psychology	2	–
	107DHR	Human Rights and Democracy	1	–
	108CO	Computer	1	–
	109BGE	Geology	1	–
	110FL	Fundamentals of Education	1	–
	111EL	English Language	1	–
	112BS	Biosafety Language	1	–
Second	215BPC	Pant Taxonomy	2	2
	216BEM	Embryology	2	2
	217BIN	Invertebrates	2	2
	218BHI	Histology	1	2
	219BBI	Biochemistry	2	1
	220BBS	Teaching Thinking	1	–
	221CO	Computer	1	–
	222DP	Curriculums and School Books	1	2

	223EASE	Leadership and Educational Administration	2	–
	224EL	English Language	1	–
	225BPC	Baath Regime Crimes	1	–
	226AL	Arabic Language	1	–

8. Expected learning outcomes of the program

Knowledge

A- The student is able to understand the various branches of life sciences

B- Preparing physics teachers at levels that keep pace with the development taking place.

C- The student understands the individual differences between students.

D- The student understands the correct foundations of scientific research.

Skills

A- The student acquires the skills of describing life sciences

B- The student acquires the skills of working in laboratories.

C- The student is able to work on qualifying himself to become a successful educational and scientific leader.

D- The student learns the correct foundations to become a successful life sciences teacher.

Ethics

A- Loves his assigned work.

B- Loves knowledge.

C- Adopts the dialogue method between the student and the teacher.

D- Ability to work in a multidisciplinary team.

9. Teaching and Learning Strategies

- Classroom education through scientific lectures.
- Preparing reports and research.
- Practical learning in scientific laboratories

10. Evaluation methods

- Processing method using final grades.
- Random and surprise tests.
- Monthly theoretical tests and practical reports on the curriculum taught.

11. Faculty

Faculty Members

Academic Rank	Specialization		Special Requirements/Skills (if applicable)		Number of the teaching staff	
	General	Special			Staff	Lecturer
Prof.Lec. Dr.	Life Sciences	Biological and evolutionary classification of plant			↗	
Lec. Dr	Life Sciences	Parasites			↗	
Lec. Dr.	Agricultural sciences	Forestry			↗	
Assis. Lec.	Life Sciences	Medical Parasites			↗	
Assis. Lec.	Chemistry sciences	Biochemistry			↗	
Assis. Lec.	Life Sciences	Animal physiology			↗	
Assis. Lec.	Chemistry sciences	Organic chemistry			↗	
Assis. Lec.	Chemistry sciences	Physical chemistry			↗	
Assis. Lec.	Life Sciences	Microbiology			↗	
Assis. Lec.	Chemistry sciences	Physical chemistry			↗	
Assis. Lec.	Arabic Language	Methods of teaching Arabic			↗	
Assis. Lec.	Life Sciences	Entomology			↗	
Assis. Lec.	Life Sciences	Animal physiology			↗	
Assis. Lec.	Agricultural sciences	Horticultural and landscape Architecture			↗	

Assis. Lec.	Teaching Curricula and Methods	General Teaching methods			↗	
Assis. Lec.	English Language	English Teaching Methods			↗	

Professional Development

Mentoring new faculty members

The head of the department directs new faculty members to adhere to working hours and lecture times and urges them to develop their academic abilities in order to provide the correct delivery to the student.

Professional development of faculty members

The head of the department develops a plan for faculty members that includes classroom and extracurricular activities for students in order to improve the level of the educational process. He also urges them to adhere to lecture times, record absences, and pay attention to all exams.

12. Acceptance Criterion

(**Central admission**

13. The most important sources of information about the program

- Books prescribed by the Ministry of Higher Education and Scientific Research.
- External scientific confiscations.
- Use of central libraries and the Internet.

14. Program Development Plan

Striving to make the physics specialization have a tangible practical application, through applying physical concepts, phenomena and principles to reality and contemporary society, in addition to courses and seminars that give the teaching staff the ability to keep pace with similar programs in countries around the world in order to obtain accreditation through developing curricula and thus developing the academic program and working on it in the correct manner.

Program Skills Outline

				Required program Learning outcomes											
Year/ Level	Course Code	Course Name	Basic or optional	Knowledge				Skills				Ethics			
				A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First	101BGB	General Biology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	102BCB	Cell Biology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	103BPA	Plant Anatomy	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	104BGC	General Chemistry	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	105AL	Arabic Language	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	106EP	Developmental and Educational Psychology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	107DHR	Human Rights and Democracy	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	108CO	Computer	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	109BGE	Geology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	110FL	Fundamentals of Education	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	111EL	English Language													
	112BS	Biosafety Language													
Second	215BPC	Pant Taxonomy	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	216BEM	Embryology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	217BIN	Invertebrates	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	218BHI	Histology	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	219BBI	Biochemistry	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	220BBS	Teaching Thinking	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	221CO	Computer	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	222DP	Curriculums and School Books	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	223EASE	Leadership and Educational Administration	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	224EL	English Language	Basic	*	*	*	*	*	*	*	*	*	*	*	*
	225BPC	Baath Regime Crimes	Basic	*	*	*	*	*	*	*	*	*	*	*	*

	226AL	Arabic Language	Basic	*	*	*	*	*	*	*	*	*	*	*	*

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

نموذج وصف المقرر

1. اسم المقرر:
تصنيف النبات (عملي)
2. رمز المقرر:
215BPC
3. الفصل / السنة: السنوي
2026-2025
4. تاريخ إعداد هذا الوصف
17-2-2026
5. أشكال الحضور المتاحة :
حضور الزامي
6. عدد الساعات الدراسية (الكلي)/ عدد الوحدات (الكلي):
عدد الساعات =60 ساعة , عدد الوحدات = 6 وحدات (4 وحدات نظري + 2 وحدة عملي)
7. اسم مسؤول المقرر الدراسي (اذا اكثر من اسم يذكر)
الاسم : م.د. سمار نشأت علي samar.n.ali@tu.edu.iq م.د. علي اكرم موسى
8. اهداف المقرر

اهداف المادة الدراسية	• قدرة الطلبة على معرفة الخصائص العامة لتصنيف النبات . • قدرة الطلبة على التمييز والادراك المعرفي في تشخيص الصفات المظهرية للنبا البذرية . • ان يكون الطالب قادر على استخدام الاجهزة المختبرية .

9. استراتيجيات التعليم والتعلم

الاستراتيجية	• استخدام وسائل ايضاح الكترونية . • تكليف الطلبة بعمل البحوث والتقارير . • تكليف الطلبة بالواجبات الخاصة بالمادة العلمية .

10. بنية المقرر

الأسبوع	الساعات	مخرجات التعلم المطلوبة	اسم الوحدة او الموضوع	طريقة التعلم	طريقة التقييم
1	2 عملي	فهم موضوع المحاضرة	الجذور : اشكالها وتحويراتها	حضوري	الاداء الصفي والامتحانات

2	2 عملي	فهم موضوع المحاضرة	السيقان : اشكالها وتحويراتها	حضوري	الاداء الصفي والامتحانات
4-3	2 عملي	فهم موضوع المحاضرة	الاوراق : اشكالها وتحويراتها	حضوري	الاداء الصفي والامتحانات
7-6-5	2 عملي	فهم موضوع المحاضرة	الازهار - اجزاء الزهرة	حضوري	الاداء الصفي والامتحانات
9-8	2 عملي	فهم موضوع المحاضرة	الانظمة الزهرية (النورات)	حضوري	الاداء الصفي والامتحانات
11-10		فهم موضوع المحاضرة	الثمار والبذور	حضوري	الاداء الصفي والامتحانات
13-12-14	2 عملي	فهم موضوع المحاضرة	عوائل الزهرية النباتية	حضوري	الاداء الصفي والامتحانات
16-15	2 عملي	فهم موضوع المحاضرة	القانون الزهري والمسقط الزهري	حضوري	الاداء الصفي والامتحانات
25-17	2 عملي	فهم موضوع المحاضرة	دراسة عائلة من ذوات الفلقة الواحدة وذات الفلقتين وعاريات البذور بواقع (4-3)	حضوري	الاداء الصفي والامتحانات

11. تقييم المقرر

الاسئلة الشفوية داخل المحاضرة والتحضير اليومي = 10%
امتحانات يومية قصيرة (امتحان مفاجئ) = 10%
امتحان شهري وتقديم تقارير = 80%

12. مصادر التعلم والتدريس

الكتب المقررة المطلوبة (المنهجية أن وجدت)	تصنيف النبات – يوسف الكاتب
المراجع الرئيسة (المصادر)	تصنيف النباتات الزهرية – علي الموسوي

الكتب والمراجع الساندة التي يوصى بها (المجلات العلمية، التقارير....)	تصنيف النباتات والتوزيع الجغرافي للنباتات البري – الفلا العراقية النباتية
المراجع الإلكترونية ، مواقع الانترنيت	

Course Description Form

1. Course name:

Biosecurity and safety

2. Course code:

3. Semester/Year:

Annual

4. Date this description was prepared:

2025/11/1

5. Available forms of attendance:

In-person education

6. Number of study hours (total) / Number of units (total):

15 hours theoretical

7. Name of the course supervisor (if more than one name is mentioned)

Name: M.M. Baneen Ali Asker
Email: banen.ali.tuz.@tu.edu.iq

8. Course objectives

Introducing students to the concepts of safety and biosecurity, the types of biological risks to which workers in biological laboratories are exposed, and the levels of safety in biological laboratories.

Personal and public safety equipment, as well as methods and procedures for reducing risks.

9. Teaching and learning strategies

Cognitive objectives	**1- Students understand and differentiate between the concepts of biosafety and biosecurity.** **2- Students know the levels of laboratory safety.** **3- Students learn about the types of biological waste in the laboratory. Students learn** **4- about the mechanism for disposing of biological waste in laboratories. Students learn** **5- about the methods for containing biological hazards in the laboratory.**
Specific skill goals	**1- Students learn how to use personal protective equipment (laboratory gowns,** **And gloves and various protectors).** **2- Introducing students to dealing with different sharp tools.** **Glassware in the laboratory.** **3- Students differentiate between types of biological waste.** **4- Students distinguish between different guidance and warning signs.**

10. Course structure

The week	Watches	Required learning outcomes	Unit name or the topic	Learning method	Evaluation method
the first	1 hour theoretical	Definition of safety and health Professionalism and its objectives And how to achieve it	Occupational Safety and Health	Theoretical	According to point 11 Below and only need
the second	1 hour theoretical	1- Distinguish between the concept of safety 1- Vitality and biosecurity. 2- Determine the level Laboratory safety	Introduction to Safety And biosecurity in The laboratory 2- Safety levels Vitality	Theoretical	According to point 11 Below and only need
the third	1 hour theoretical	1- Identify the type Biological hazards 2- Determine the level of danger of the organism or agent. Pathogenic Biologist	Biological hazards	Theoretical	According to point 11 Below and only need
Fourth	1 hour theoretical	Students distinguish between safety requirements and follow procedures to contain risks.	Ways to control Biological hazards	Theoretical	According to point 11 Below and only need
Fifth-Sixth	1 hour theoretical	Students distinguish between types of signposts.	Signs And the warning	Theoretical	According to point 11 Below and only need
Seventh	1 hour theoretical		First exam		
Eighth-Ninth	1 hour theoretical	1- Students distinguish between types biological waste 2- Students learn about the methods Trading and dealing With laboratory waste	Types of biological waste	Theoretical	According to point 11 Below and only need
tenth	1 hour theoretical	Students learn the concept of biosecurity and the impact of factors Biology on society and environment	Biosecurity	Theoretical	According to point 11 Below and only

					need
eleventh	1 hour theoretical	Students learn the basics of risk assessment.	Biological risk assessment	Theoretical	According to point 11 Below and only need
twelfth	1 hour theoretical		Second exam		According to point 11 Below and only need
13th 1 hour		Learn how to manage Risks	Risk management methodology	Theoretical	According to point 11 Below and only need
14th 1 hour	theoretical	1- Identify policies Handling information sensitive related With the security program Biology. 2- Introducing students to the mechanisms Transport of biological materials Methods of containing risks during transportation	Information security	Theoretical	According to point 11 Below and only need
15th	1 hour theoretical	Students learn about the criteria and conditions. Allowed research	Sharia research and codes of conduct and practice	Theoretical	According to point 11 Below and only need

11. Course Evaluation

1- Oral assessment through student participation in
2- discussions. Short tests (Quiz).
3- Monthly and semester exams.

12. Learning and teaching resources

Required textbooks (methodology if any)	
Main References (Sources)	Iraqi Ministry of Health, 2020. Shamisen, Amman, of higher education and scientific research and practices material. In corporation of Iraqi Ministry 1-The guidance of Biosafety managements, Jordan

	2- WHO, 2020, Laboratory biosafety manual Fourth edition, Geneva, Austria. Associations, Laboratory Biosafety and Biosecurity 3-The International Federation of Biosafety Risk Assessment Technical Guidance Document, SANDIA National Laboratories, USA. 4- Guidelines for the Shipping and Receiving .Biological Materials
Recommended supporting books and references (scientific journals, reports...)	
Electronic references, websites	-WHO, 2020, Laboratory biosafety manual fourth edition, Geneva, Austria. -The International Federation of Biosafety Guidance Document, SANDIA National Biosecurity Risk Assessment Technical Associations, Laboratory Biosafety and Laboratories - Guidelines for the Shipping and Receiving Biological Materials. Northern Kentucky University.

Course Description Form

.1 Course Name:	
TheArabic Language	
.2 Course Code:	
AL 226	
.3 Semester / Year: Annual	
First and Second Semester of Academic Year 2025 – 2026	
.4 Date of Preparation of This Description	
17/ 9/ 2025	
.5 Available Attendance Modes:	
Theoretical	
.6 Total Number of Academic Hours / Total Credit Units:	
30 Hours / 2	
.7 Name of Course Coordinator (mention all if more than one)	
Asst. Lect. Wejdan Hamid Ibrahim Email: wejdan.h.ibrahim@tu.edu.iq	
.8 Course Objectives	
*This course aims to provide students with comprehensive knowledge of Arabic linguistics.. *Familiarizing students with some rules and fundamentals of the Arabic language.. *Focusing on the outcomes of the College of Education Tuz Khurmatu in order to graduate a generation capable of occupying educational positions in the Ministry of Higher Education and the Ministry of Education..	**Course Objectives**
.9 Teaching and Learning Strategies	
Delivering lectures through modern educational media using technology presenting illustrative slides of scientific models via display screens. 2. Delivering practical lectures relying on the smart screen. 3. Preparing scientific reports.. 4. Field visits to thescientific library.. Opening the floor for scientific discussions among students to enhance comprehension and broaden	**Strategy**

cognitive understanding.. Lectures Interactive Lecture discussion Dialogue and Discussion Brainstorming Brainstorming	

Course Structure .10

Assessment Method	Teaching Method	Unit / Topic Name	Required Learning Outcomes	Hours	Week
Classroom Performance and Daily Written Tests	Attendance	The Holy Quran Surah Al-Isra, Verses (23 – 29)	Understanding the lecture topic	1	1
Classroom Performance and Daily Written Tests	Attendance	Arabic Grammar: Present Tense Verb – Accusative and Jussive Cases	Understanding e Lecture Topic	1	2
Performance Classroom and Daily Written Tests	Attendance	From the Noble Prophetic Hadith: "Indeed, Allah loves when of you performs a task to do it with excellence."	Understanding e Lecture Topic	1	3
Classroom Performance and Daily Written Tests	Attendance	Verses from the Poetry of Al-Sharif Al-Radi "I weep for you; if only my weeping could quench the thirst" "And I say, if only words could heal my pain"	Understanding the lecture topic	1	4
Classroom Performance and Daily Written Tests	Attendance	Rules for Writing Taa (Open and Closed) Stages of Language Compilation	Understanding the lecture topic	1	5

Performance Classroom and the	Attendance	Monthly Examination	Monthly Examination	1	6
Classroom Performance and Daily Written Tests	Attendance	Hymn of the Rain / Al-Sayyab	Understanding the lecture topic	1	7
Classroom Performance and Daily Written Tests	Attendance	Accusative Nouns (Al-Mansubat)	Understanding the lecture topic	1	8
Classroom Performance and Daily Written Tests	Attendance	Arts of Prose	Understanding the lecture topic	1	9
Classroom Performance and Daily Written Tests	Attendance	Rules for Writing Dhad and Dha Rules for Writing Alef (Extended and Shortened)	Understanding the lecture topic	1	10
Classroom Performance and Daily Written Tests	Attendance	Lexicology: Vocabulary and Semantics	Understanding the lecture topic	1	11
Classroom Performance and Daily Written Tests	Attendance	O Benevolent Tigris / Al-Jawahiri	Understanding the lecture topic	1	12

Classroom Performance andand the W	Attendance	Monthly Examination	Monthly Examination	1	13
Classroom Performance and Daily Written Tests	Attendance	Arabic Grammar: Numbers and Their Rules Followers (Al-Tawabi') Common Linguistic Errors	Understanding the lecture topic	1	14
Classroom Performance and Daily Written Tests	Attendance	Al-Mutanabbi's Mimiya: "How my heart aches for one whose heart is cold" "And the one with whom es the sickness of my body and state"	Understanding the lecture topic	1	15
Classroom Performance and Daily Written Tests	Attendance	From Surah Yusuf (Verses 1–7)	Understanding the lecture topic	1	16
Classroom Performance and Daily Written Tests	Attendance	Noun Declension (Tasrif Al-Asma): Nouns in Terms of Masculine and Feminine Nouns in Terms of Root and Derived Forms Nouns in Terms of Singular, Dual, and Plural	Understanding the lecture topic	1	17
Classroom Performance and Examination Written	Attendance	Monthly Examination	Monthly Examination	1	18
Classroom Performance and Daily Written Tests	Attendance	m the Noble Hadith: ("Do not envy another; do not outbid one another...")	Understanding the lecture topic	1	19

Classroom Performance and Daily Written Tests	Attendance	Arabic Rhetoric: (Semantic Embellishments) (Rhetorical Figures of Speech)	Understanding the lecture topic	1	20
Classroom Performance and Daily Written Tests	Attendance	Methodology of my School (Al-Maqayis) and (Al-Sihah)	Understanding the lecture topic	1	23
Classroom Performance and Monthly Examination	Attendance	Monthly Examination	Monthly Examination	1	24

11. Course Assessment

Grade Distribution out of 100 According to Assigned Student Tasks:
1. Daily Preparation and Oral Questions: 10%
2. Daily Quizzes, Short Tests, and Surprise Examinations: 10%
3. Monthly Examinations and Report Submissions: 80%

12. Learning and Teaching Resources

	Required Textbooks (Curriculum–Based if available)
Quranic Exegesis: Al-Raghib Al-Asfahani. **Ibn Aqil's Commentary on Ibn Malik's Alfiyya.** **Shatha Al-Arf fi Fan Al-Sarf: Ahmad Al-Hamlawi.** **Rhetoric and Application: Ahmad Matlub.** **Jami' Al-Durus Al-Arabiyya: Mustafa Al-Ghalayini.**	Key References (Sources)
Peer-reviewed Scientific Journals published by Academic Publishers	Recommended Supporting Books and References (Scientific Journals, Reports, etc.)
Noor Library	Electronic References

: https://search.app/Jq64GAXPLriv3QBK6 General Arabic Language Library: https://t.me/langnnnarabic Arabic Literature Library: https://t.me/dewan55	and Internet Sources

Course description form

1. Course name: Educational and Developmental Psychology	
Foundations of Education	
2. Course code: 106EP	
3. Semester/Year:	
Annual	
4. This description was prepared at the beginning of the 2025-2026 academic year.	
5. Available attendance formats: In-person	
6. Total study hours/total units: 60 hours, number of units: 2	
7. Name of the course administrator (if more than one name is mentioned) /	
Name: Dr. Abd ulsattar Saleh Aasi Email abdelsattar.s.a@tu.edu.iq	
8. Course objectives	
	This course aims to introduce students to educational psychology, its concept and objectives; the concept of learning, its applications, theories, and educational applications; information processing theory; transfer of learning, its types, and feedback; motivation, its definition, functions, and theories; problem-solving; the historical background of learning; the concept, definition, and stages of linguistic and cognitive development; the stages of human development; and the differentiation between the branches of psychology.
9. Teaching and learning strategies	
.Brainstorming, dialogue, discussion, and some classroom activities - Using educational discussion (educational dialogue), which relies on exchanging - .ideas to arrive at facts .Group journaling to involve all students in classroom activities - - Presentations.	
10. Course structure	

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	week

Oral and written test	,Dialogue discussion, and brainstorming Presentations	Educational psychology: its definition, historical development, goals, and fields.	Educational psychology: its definition, historical development, goals, and fields.	3	1
Oral and written test	Dialogue, discussion and brainstorming Presentations	Education and learning: the concept and nature of the learning process	Education and learning: the concept and nature of the learning process	3	2
Oral and written test	Dialogue, discussion and brainstorming Presentations	Basic characteristics of learning and the difference between learning and teaching	Basic characteristics of learning and the difference between learning and teaching	3	3
Oral and written test	Dialogue, discussion and brainstorming Presentations	Theories of learning and teaching and their educational applications	Theories of learning and teaching and their educational applications	3	4
Oral and written test	Dialogue, discussion and brainstorming Presentations	Thorndike, Pavlov, Skinner, and Gestalt	Thorndike, Pavlov, Skinner, and Gestalt	3	5
Oral test	Dialogue, discussion and brainstorming Presentations	Social and cognitive learning theory	Social and cognitive learning theory	3	6
Oral and written test	Dialogue, discussion and brainstorming Presentations	First month exam	First month exam	3	7
Oral and written test	Dialogue, discussion and brainstorming Presentations	Remembering and Forgetting	Remembering and Forgetting	3	8
Oral and written test	Dialogue, discussion and brainstorming Presentations	Theories Explaining Forgetting: Main Theories Explaining Forgetting	Theories Explaining Forgetting: Main Theories Explaining Forgetting	3	9
Oral and written test	Dialogue, discussion and brainstorming Presentations	Information Processing Theory / Applications of the Theory and Transfer of Learning	Information Processing Theory / Applications of the Theory and Transfer of Learning	3	10

Oral and written test	Dialogue, discussion and brainstorming Presentations	Educational theories and applications, and assistive technologies for the transfer of learning.	Educational theories and applications, and assistive technologies for the transfer of learning.	3	11
Oral and written test	Dialogue, discussion and brainstorming Presentations	The concept, its nature, the factors influencing it, and its theories	The concept, its nature, the factors influencing it, and its theories	3	12
Oral and written test	Dialogue, discussion and brainstorming Presentations	Thinking, learning skills, habits, motivation, and classroom interaction	Thinking, learning skills, habits, motivation, and classroom interaction	3	13
Oral and written test	Dialogue, discussion and brainstorming Presentations	Problem solving and feedback	Problem solving and feedback	3	14
Oral and written test	Dialogue, discussion and brainstorming Presentations	Second month exam	Second month exam	3	15
Oral and written test	Dialogue, discussion and brainstorming Presentations	Developmental psychology	Developmental psychology	3	16
Oral and written test	Dialogue, discussion and brainstorming Presentations	Influencing factors	Influencing factors	3	17
Oral and written test	Dialogue, discussion and brainstorming Presentations	Research methods in developmental psychology	Research methods in developmental psychology	3	18
Oral and written test	Dialogue, discussion and brainstorming Presentations	Childhood	Childhood	3	19
Oral and written test	Dialogue, discussion and brainstorming Presentations	Mental development	Mental development	3	20
Oral and written test	Dialogue, discussion and brainstorming Presentations	The role of social institutions	The role of social institutions	3	21

Oral and written test	Dialogue, discussion and brainstorming Presentations	First month exam for the second semester	First month exam for the second semester	3	22
Oral and written test	Dialogue, discussion and brainstorming Presentations	adolescence	adolescence	3	23
Oral and written test	Dialogue, discussion and brainstorming Presentations	Adolescence and society	Adolescence and society	3	24
Oral and written test	Dialogue, discussion and brainstorming Presentations	Adolescence and career	Adolescence and career	2	25
Oral and written test	Dialogue, discussion and brainstorming Presentations	Teenagers' trends and inclinations	Teenagers' trends and inclinations	3	26
Oral and written test	Dialogue, discussion and brainstorming Presentations	Sources of acquiring inclinations and attitudes	Sources of acquiring inclinations and attitudes	3	27
Oral and written test	Dialogue, discussion and brainstorming Presentations	Adolescent problems	Adolescent problems	3	28
Oral and written test	Dialogue, discussion and brainstorming Presentations	Second month exam, semester 2	Second month exam, semester 2	3	29
Oral and written test	Dialogue, discussion and brainstorming Presentations	Aggressive behavior	Aggressive behavior	3	30

11. Course evaluation

- Theoretical exams
- Questions outside the box
- Oral exams

12. Curriculum and textbook

Abdel-Hadi, Nabil (2024): Educational • Psychology: Theories, Methods, and .Applications, Dar Al-Yazouri Al-Atoum, Alawneh, Al-Jarrah, and Ghazal • Educational Psychology: Theory and :(2013)	Main references (sources)

.Application, Dar Al-Masirah, Jordan ,Nashwati (2003): Educational Psychology • .Dar Al-Furqan, Jordan ,Abu Jadu (2003): Educational Psychology • .Dar Al-Masirah, Jordan Musan Paul, et al. (1986): Foundations of • Child and Adolescent Psychology, Al-Falah .Library, Kuwait • Arifaj, Sami (1992): Developmental Psychology, Majlawi, Jordan.	
	Recommended supporting books and references (scientific journals, reports...)
	Electronic references, websites

Course Description Form

1. Course Name:
Computer
2. Course Code:
H016
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2026
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours / 1 unit
7. Course administrator's name (mention all, if more than one name)
Name: kamaran Adil Ibrahim **Email: kamaran_zm@tu.edu.iq**

8. Course Objectives	
Course Objectives	*** Preparing and qualifying specialists to meet the requirements of the labor market in its public and private sectors by diversifying teaching and learning methods and training students to apply acquired knowledge and skills to solve real-world problems.** *** Creating an appropriate climate for students to enable them to apply their acquired knowledge and skills in identifying the needs and problems of society and social matters related to computers and information technology.** *** Providing distinguished academic programs in the field of computers, both theoretical and practical, that are consistent with international standards of academic quality and meet the needs of the labor market.** *** Encouraging and developing scientific research in the fields of computers in general and in the areas of office software suites (Office) in particular.** *** Developing the scientific and technical capabilities in educational laboratories and providing all their requirements.** *** Providing specialized laboratories for scientific research equipped with scientific capabilities to provide an opportunity for teaching staff to develop their abilities.** *** Working to publish scientific and qualitative articles and publications that**

	keep pace with the information development wheel in the world. * Holding specialized scientific conferences.

9. Teaching and Learning Strategies	
Strategy	Lecture method, laboratory dialogue, discussion, and giving examples.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	Concepts of Hardware and Software with their components.	Introduction to Computers	Theoretical lecture	General questions, discussion, and monthly exams.
2	1	Concept of Computing, Data and Information; Applications of Information, Connecting input/output devices and peripherals to the CPU.	Introduction to Computers	Theoretical lecture	General questions, discussion, and monthly exams.
3	1	Computer Parts, Hardware Components, Input/Output Units.	Computer Components	Theoretical lecture	General questions, discussion, and monthly exams.
4	1	Memory Types: Volatile Memory and Non-Volatile Memory, Secondary Storage.	Computer Components	Theoretical lecture	General questions, discussion, and monthly exams.
5	1	CPU Components: Control Unit (CU), Arithmetic	Computer Components	Theoretical lecture	General questions, discussion, and monthly exams.

		Logic Unit (ALU) and Registers.			
6	1	Computer Ports, Personal Computer (Features and Types).	Computer Components	Theoretical lecture	General questions, discussion, and monthly exams.
7	1	Operating System; Basics of Common Operating Systems; The User Interface, Using Mouse Techniques.	Operating System and Graphical User Interface (GUI)	Theoretical lecture	General questions, discussion, and monthly exams.
8	1	Use of Common Icons, Status Bar, Using Menus and Menu Selection.	Operating System and Graphical User Interface (GUI)	Theoretical lecture	General questions, discussion, and monthly exams.
9	1	Concept of Folders and Directories, Opening and Closing Different Windows; Creating Shortcuts.	Operating System and Graphical User Interface (GUI)	Theoretical lecture	General questions, discussion, and monthly exams.
10	1	Customization and Personalization of GUIs, Accessibility Features in GUIs, User Experience (UX).	Operating System and Graphical User Interface (GUI)	Theoretical lecture	General questions, discussion, and monthly exams.
11	1	Word Processing Basics; Basic Features of	Word Processing	Theoretical lecture	General questions, discussion, and monthly exams.

		Word Processors, Opening and Closing Documents.			
12	1	Text Creation and Manipulation; Formatting Text and Paragraphs, Using Templates for Document Creation.	Word Processing	Theoretical lecture	General questions, discussion, and monthly exams.
13	1	Creating and Managing Tables, Utilizing Styles and Themes.	Word Processing	Theoretical lecture	General questions, discussion, and monthly exams.
14	1	Spell Check and Grammar Tools, Using Headers and Footers.	Word Processing	Theoretical lecture	General questions, discussion, and monthly exams.
15	1	Introduction to Spreadsheet Software, Creating and Formatting Worksheets.	Spreadsheets	Theoretical lecture	General questions, discussion, and monthly exams.
16	1	Sorting and Filtering Data, Using Formulas and Functions.	Spreadsheets	Theoretical lecture	General questions, discussion, and monthly exams.
17	1	Using Formulas and Functions, Using Pivot Tables for Data Analysis.	Spreadsheets	Theoretical lecture	General questions, discussion, and monthly exams.
18	1	Data Validation and Error	Spreadsheets	Theoretical lecture	General questions, discussion, and monthly

		Checking, Data Visualization: Creating Charts and Graphs.			exams.
19	1	Introduction to Presentation Software, Overview of Popular Presentation Tools, Creating a New Presentation.	Presentation Software	Theoretical lecture	General questions, discussion, and monthly exams.
20	1	Using Templates and Themes, Inserting and Formatting Text and Images, Transition and Animation Effects.	Presentation Software	Theoretical lecture	General questions, discussion, and monthly exams.
21	1	Using Speaker Notes and Timers, Advanced Features: Hyperlinks and Action Buttons.	Presentation Software	Theoretical lecture	General questions, discussion, and monthly exams.
22	1	Troubleshooting Common Presentation Issues, Future Trends in Presentation Technology.	Presentation Software	Theoretical lecture	General questions, discussion, and monthly exams.

23	1	Computer Networks Basics; LAN, WAN.	Introduction to Internet and Web Browsers	Theoretical lecture	General questions, discussion, and monthly exams.
24	1	Concept of Internet and its Applications; Connecting to the Internet.	Introduction to Internet and Web Browsers	Theoretical lecture	General questions, discussion, and monthly exams.
25	1	World Wide Web; Web Browsing Software, Search Engines.	Introduction to Internet and Web Browsers	Theoretical lecture	General questions, discussion, and monthly exams.
26	1	Understanding URL; Domain Name; IP Address.	Introduction to Internet and Web Browsers	Theoretical lecture	General questions, discussion, and monthly exams.
27	1	Basics of Electronic Mail; Getting an Email Account; Sending and Receiving Emails; Accessing Sent Emails; Using Email; Document Collaboration.	[Communications and Email]	Theoretical lecture	General questions, discussion, and monthly exams.
28	1	Sending and Receiving Emails;	[Communications and Email]	Theoretical lecture	General questions, discussion, and monthly

		Accessing Sent Emails; Using Email; Document Collaboration.			exams.
29	1	Definition of Cloud Computing and its Concept, Cloud-Based Office Suites (Office 365 and Google Workspace).	[Introduction to Cloud Computing and Services]	Theoretical lecture	General questions, discussion, and monthly exams.
30	1	Google Workspace: Google Docs, Google Sheets, Google Drive, Google Meet.	[Introduction to Cloud Computing and Services]	Theoretical lecture	General questions, discussion, and monthly exams.

11.Course Evaluation

Distribution of the 25 marks according to the tasks assigned to the student, such as daily preparation, daily, monthly, and written exams, etc.

12.Learning and Teaching Resources

Recommended supporting books and referen (scientific journals, reports...):	Theses and Dissertations
Electronic references, internet sites:	Electronic Research

13.Curriculum Development Plan

- Familiarity with the latest developments in teaching and learning strategies.
- Using modern technology and scientific reports through illustrative videos to consolidate the scientific material visually.

Course Description Form

1. Course Name:
Computer
2. Course Code:
H016
3. Semester / Year:
Annual
4. Description Preparation Date:
2025-2026
5. Available Attendance Forms:
Attendance
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours / 1 unit
7. Course administrator's name (mention all, if more than one name)
Name: kamaran Adil Ibrahim **Email: kamaran_zm@tu.edu.iq**

8. Course Objectives	
Course Objectives	*** Preparing and qualifying specialists to meet the requirements of the labor market in its public and private sectors by diversifying teaching and learning methods and training students to apply acquired knowledge and skills to solve real-world problems.** *** Creating an appropriate climate for students to enable them to apply their acquired knowledge and skills in identifying the needs and problems of society and social matters related to computers and information technology.** *** Providing distinguished academic programs in the field of computers, both theoretical and practical, that are consistent with international standards of academic quality and meet the needs of the labor market.** *** Encouraging and developing scientific research in the fields of computers in general and in the areas of office software suites (Office) in particular.** *** Developing the scientific and technical capabilities in educational laboratories and providing all their requirements.** *** Providing specialized laboratories for scientific research equipped with scientific capabilities to provide an opportunity for teaching staff to develop their abilities.** *** Working to publish scientific and qualitative articles and publications that**

	keep pace **with the information development wheel in the world.** *** Holding specialized scientific conferences.**

9. Teaching and Learning Strategies	
Strategy	Lecture method, laboratory dialogue, discussion, and giving examples.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	What is a network? Types of networks. Basic network components.	Introduction to Computers	Theoretical lecture	General questions, discussion, and monthly exams.
2	1	Basic network components.	Security and Networking	Theoretical lecture	General questions, discussion, and monthly exams.
3	1	Network Security Basics. Understanding network threats. Network Troubleshooting	Security and Networking	Theoretical lecture	General questions, discussion, and monthly exams.
4	1	Introduction to Network Troubleshooting, Common Network Issues and Symptoms, Network Troubleshooting Tools and Utilities.	Security and Networking	Theoretical lecture	General questions, discussion, and monthly exams.
5	1	Using Command- Line Tools for Diagnostics, Identifying and Resolving Connectivity Issues,	Security and Networking	Theoretical lecture	General questions, discussion, and monthly exams.

		Diagnosing Network Performance Problems			
6	1	Electronic banking services this include online banking: ATM and debit card services.	E-Commerce	Theoretical lecture	General questions, discussion, and monthly exams.
7	1	Phone banking, SMS banking, electronic alert, Mobile banking.	E-Commerce	Theoretical lecture	General questions, discussion, and monthly exams.
8	1	Introduction to Computer Troubleshooting, Common Hardware Issues and Solutions, Diagnosing Software Problems.	Computer Troubleshooting	Theoretical lecture	General questions, discussion, and monthly exams.
9	1	Hardware Components: Diagnosis and Repair, Using Safe Mode for Troubleshooting.	Computer Troubleshooting	Theoretical lecture	General questions, discussion, and monthly exams.
10	1	Troubleshooting Operating System Issues, Identifying and Resolving Blue Screen Errors, Dealing with Slow Computer Performance	Computer Troubleshooting	Theoretical lecture	General questions, discussion, and monthly exams.
11	1	Virus and Malware Removal Techniques, Updating	Computer Troubleshooting	Theoretical lecture	General questions, discussion, and monthly exams.

		Drivers and Software.			
12	1	Definition of AI, History of AI, AI Techniques and Approaches.	Introduction to AI	Theoretical lecture	General questions, discussion, and monthly exams.
13	1	Key Characteristics of AI, Benefits of AI, Challenges and Ethical considerations.	Introduction to AI	Theoretical lecture	General questions, discussion, and monthly exams.
14	1	Challenges and Limitations of AI, The Role of Data in AI Systems.	Introduction to AI	Theoretical lecture	General questions, discussion, and monthly exams.
15	1	AI Tools and Frameworks.	Introduction to AI	Theoretical lecture	General questions, discussion, and monthly exams.
16	1	AI-Driven Mobile Technologies, Virtual Assistants (Siri, Google Assistant, Alexa).	The Role of AI in Modern Smartphones	Theoretical lecture	General questions, discussion, and monthly exams.
17	1	Adaptive Learning, Real-Time Translation Services.	The Role of AI in Modern Smartphones	Theoretical lecture	General questions, discussion, and monthly exams.
18	1	The Future of AI in Smartphone Technology, Challenges of Implementing AI in Mobile Devices.	The Role of AI in Modern Smartphones	Theoretical lecture	General questions, discussion, and monthly exams.

19	1	Overview of AI Applications in Various Industries, Education and Healthcare.	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
20	1	Transportation and Advertising.	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
21	1	Finance, Robotics and Automation Technologies..	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
22	1	AI in Marketing: Targeting and Personalization.	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
23	1	AI in Image and Video Analysis, Smart Cities	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
24	1	Future Trends in AI Applications and Tools.	Applications and Tools of AI	Theoretical lecture	General questions, discussion, and monthly exams.
25	1	Introduction to AI and Its Societal Impact, The Role of AI in Enhancing Public Safety.	AI and Society	Theoretical lecture	General questions, discussion, and monthly exams.
26	1	Cultural Perspectives on AI Adoption, AI	AI and Society	Theoretical lecture	General questions, discussion,

		and Governance: Policy Implications			and monthly exams.
27	1	Introduction to Ethics in AI, Transparency and Explainability of AI Systems, Privacy Concerns in AI Data Usage.	**Ethical Challenges in AI**	Theoretical lecture	General questions, discussion, and monthly exams.
28	1	The Ethical Implications of Autonomous Systems, Ethics in AI-Driven Marketing and Advertising	Ethical Challenges in AI	Theoretical lecture	General questions, discussion, and monthly exams.
29	1	Ethical Considerations in Education, Human Rights and AI Implementation	Ethical Challenges in AI	Theoretical lecture	General questions, discussion, and monthly exams.
30	1	Future trends in AI, recent research and emerging technologies.	The Future of AI	Theoretical lecture	General questions, discussion, and monthly exams.

11.Course Evaluation

Distribution of the 25 marks according to the tasks assigned to the student, such as daily preparation, daily, monthly, and written exams, etc.

12.Learning and Teaching Resources

Recommended supporting books and referen (scientific journals, reports...):	Theses and Dissertations
Electronic references, internet sites:	Electronic Research

13.Curriculum Development Plan
• Familiarity with the latest developments in teaching and learning strategies. • Using modern technology and scientific reports through illustrative videos to consolidate the scientific material visually.

Course Description Form

1. Course Name:
English\ second stage
2. Course Code:
UOB110
3. Semester / Year:
annual
4. Description Preparation Date:
2005-2006
5. Available Attendance Forms:
Daily
6. Number of Credit Hours (Total) / Number of Units (Total)
60 hours\ 2unit
7. Course administrator's name (mention all, if more than one name)
Name: Nooray A. Hameed **Email:** nooray.a.hameed@tu.edu.iq
8. Course Objectives

Course Objectives	1-Students will acquire knowledge, concepts, and attitudes in speaking English fluently. -2. It will facilitate the understanding of concepts. -3. It will showcase students' diverse talents.
9. Teaching and Learning Strategies	
Strategy	1. Readings, self-learning, and discussion groups. 2. Interaction and participation in the lesson. 3. Assigning exercises and homework. 4. Guiding students to useful websites.

10. Course Structure					
Week	**Hours**	**Required Learning Outcomes**	**Unit or Subject name**	**Learning Method**	**Evaluation Method**
1	1	Students are able to introduce themselves, gives greetings and a Simple Questions	Getting to Know You: Introductions & Greetings	Theoretical	Discussion
2	1	Students are able to use the simple present tense to talk about daily routines	Getting to Know You: Gramma Present Simple	Theoretical	Discussion
3	1	Students are able to describe their daily life and routine	The Way We Live: Daily Life	Theoretical	Discussion
4	1	Students are able to use the terminology of daily activities and temporal expressions	The Way We Live: Vocabulary – Daily Activities	Theoretical	Discussion
5	1	Students are able to recount past events and use the simple past	It All Went Wrong: Mistakes and Funny Situations	Theoretical	Discussion
6	1	Students are able to phrase sentences correctly to talk about the past	It All Went Wrong: Grammar – Past Simple	Theoretical	Discussion
7	1	Students are able to order products, describe things, and purchase	Let's Go Shopping: Shopping and buying	Theoretical	Discussion

8	1	Students are able to use shopping vocabulary and prices	Let’s Go Shopping: Vocabulary – Shopping & Prices	Theoretical	Discussion
9	1	Students are able to talk about hobbies and future plans	What Do You Want to Do?: Interests and Plans	Theoretical	Discussion
10	1	Students are able to use the simple future to express plans	What Do You Want to Do?: Grammar – Future Simple	Theoretical	Discussion
11	1	Students are able to describe places and emotions using adjectives	Tell Me! What’s It Like?: Describing Places and Experiences	Theoretical	Discussion
12	1	Students are able to express an opinion and compare things	Tell Me! What’s It Like?: Vocabulary – Adjectives & Opinions	Theoretical	Discussion
13	1	Students are able to narrate information about celebrities and express their opinion	Fame: Talking about Celebrities	Theoretical	Discussion
14	1	Students are able to use comparisons and preference in talking about people	Fame: Grammar – Comparatives & Superlatives	Theoretical	Discussion
15	1	Assessing students' understanding of the first semesters and acquiring basic language skills	Exam	Theoretical	Discussion

16	1	Students are able to use the vocabulary of history and culture in speech	Living History: Historical Events	Theoretical	Discussion
17	1	Students are able to narrate sequential events and connect ideas	Living History: Vocabulary – History & Culture	Theoretical	Discussion
18	1	Students are able to use the continuous past to describe current events in the past	Time for a Story: Storytelling	Theoretical	Discussion
19	1	Students are able to describe modern media and communication	Time for a Story: Grammar – Past Continuous	Theoretical	Discussion
20	1	Students are able to use internet terminology and modern devices	Our Interactive World: Technology & Social Interaction	Theoretical	Discussion
21	1	Students are able to describe innovations, changes, and their impact on life	Our Interactive World: Vocabulary – Media & Technology	Theoretical	Discussion
22	1	Students are able to use the present tense to express experiences and changes	What's Changed the World?: Innovations & Changes	Theoretical	Discussion
23	1	Students are able to formulate questions and discuss different topics	What's Changed the World?: Grammar – Present Perfect	Theoretical	Discussion

24	1	Students are able to use the vocabulary and tools of the question correctly	Just Wondering …: Asking Questions	Theoretical	Discussion
25	1	Students are able to describe occupations, daily tasks, and work-related places	Just Wondering …: Vocabulary – Question Words & Expressions	Theoretical	Discussion
26	1	Students are able to merge the present and past tense to talk about practical experiences	The Way I Earn a Living: Jobs & Work	Theoretical	Discussion
27	1	Students are able to describe family members and social connections	The Way I Earn a Living: Grammar – Present & Past Simple	Theoretical	Discussion
28	1	Students are able to use family vocabulary and relationships in conversation and book	Family Ties: Family Relationships	Theoretical	Discussion
29	1	Students are able to describe historical events and determine the chronology	Family Ties: Vocabulary – Family & Relationships	Theoretical	Discussion
30	1	Final assessment of listening, speaking, reading and writing skills	Living History: Historical Events	Theoretical	Discussion

Course Evaluation	
1. The first semester exam is divided into a monthly exam + a daily exam (25 marks) 2. The second semester exam is divided into a monthly exam + a daily exam (25 marks). 3. Final exam (50 marks)	
12: Learning and Teaching Resources	
Required Textbooks (Methodology, if any)	Headway– pre–intermediate
Main References (Sources)	How Languages are Learned Teaching by Principles Principles of Language Learning and Teaching TESOL Quarterly ELT Journal Applied Linguistics British Council
Recommended books and references (Scientific journals, reports...)	ERIC Google Scholar ResearchGate JSTOR ScienceDirect

Course Description Form

1. Course Information
Human Rights and Democracy
2. Course Code
107
3. Semester / Year: Annual
2026−2025
4. Date of Preparation:
2025-11-20
5. Attendance Form
In-person (Mandatory)
6. Total Credit Hours / Units:
60 Hours / 2 Units
7. Course Coordinator:
Asst. Lect. Nihad abdullah mahmood nihad.A.mahmood@tu.edu.iq
8. Course Objectives

• Preparing a conscious generation aware of human rights and public freedoms. • Developing cultural levels and increasing student awareness. • Keeping students updated with other nations' experiences in human rights. • Familiarizing students with key international conventions, treaties, and instruments. • Informing students about constitutional articles guaranteeing rights and freedoms. • Educating students on their rights, freedoms, protection methods, and limits. • Understanding the role of education in spreading the culture of democracy and good governance.	**Course objectives**

• Encouraging active participation in governance through free and fair elections. • Developing analytical and critical skills regarding the future of human rights.	

9. and Learning Strategies

• Direct lecture delivery method. • Student groups and collaborative learning. • Workshops. • Reports and research studies. • Use of illustrative aids and visual tools. • Attendance and physical presence tracking. • Role-playing strategies within the classroom. • Writing analytical papers related to human rights and democracy topics.	**Teaching**

10. Course Structure (Weekly Plan)

Assessment Method	Teaching Method	Unit/Topic Title	Learning Outcomes	Hours	Week
Q&A	Q&A	Concept of Human Rights and the International Bill of Rights	Concept & Importance	2	1
Oral Questions	Oral Questions	Human Rights Definition and National Implementation Mechanisms	Concept & Importance	2	2

Daily Quiz	Daily Quiz	Concept of the International Bill of Human Rights	Concept & Importance	2	3
Q&A	Q&A	Categorical and Special Rights	Concept & Importance	2	4
Written Exam	Written Exam	Rights of Women, Children, Minorities, and Persons with Disabilities	Concept & Importance	2	5
Q&A	Q&A	National Procedures for Implementing Special or Categorical Rights	Concept & Importance	2	6
Interrogation	Interrogation	Grave Violations of Human Rights	Concept & Importance	2	7
Discussion	Discussion	Combating Grave Violations of Human Rights	Concept & Importance	2	8
Interrogation	Interrogation	International Humanitarian Law & Human Rights in Conflict	Concept & Importance	2	9
Q&A	Q&A	Grave Violations of Human Rights in Iraq	Concept & Importance	2	10
Q&A	Q&A	Human Rights Council & Universal Periodic Review (UPR)	Concept & Importance	2	11

Oral Questions	Oral Questions	International/Regional Protection Mechanisms & Accountability	Concept & Importance	2	12
Daily Quiz	Daily Quiz	Contemporary Challenges in Human Rights	Concept & Importance	2	13
Q&A	Q&A	Challenges Facing Human Rights	Concept & Importance	2	14
Written Exam	Written Exam	National and Procedural Mechanisms to Enhance Rights	Concept & Importance	2	15
Q&A	Q&A	Democracy: Historical Origins and Evolutionary Path	Concept & Importance	2	16
Interrogation	Interrogation	Historical Concepts of Democracy's Emergence & Foundations	Concept & Importance	2	17
Discussion	Discussion	Evolution of Democracy in the Modern Era and its Correlates	Concept & Importance	2	18
Interrogation	Interrogation	Democracy in the 20th Century: Totalitarianism vs. Expansion	Concept & Importance	2	19
Q&A	Q&A	Patterns of Democracy in Contemporary Contexts	Concept & Importance	2	20

Q&A	Q&A	Islam and Democracy	Concept & Importance	2	21
Oral Questions	Oral Questions	Institutions and Mechanisms of Democracy	Concept & Importance	2	22
Daily Quiz	Daily Quiz	Separation of Powers and Democratic Governance Principles	Concept & Importance	2	23
Q&A	Q&A	Elections as a Mechanism for Democracy	Concept & Importance	2	24
Written Exam	Written Exam	Political Parties	Concept & Importance	2	25
Q&A	Q&A	Civil Society and Pressure Groups	Concept & Importance	2	26
Interrogation	Interrogation	Relations between Democracy and Public Movements	Concept & Importance	2	27
Discussion	Discussion	Guarantees of Rights and Freedoms in Democratic Systems	Concept & Importance	2	28
Interrogation	Interrogation	Media and Democracy	Concept & Importance	2	29
Q&A	Q&A	Democratic Systems and Comparative Studies	Concept & Importance	2	30

Q&A	Q&A	Democracy in the Developing World: Challenges & Models	Concept & Importance	2	31
Oral Questions	Oral Questions	Digital Transformation in Democratic Practice	Concept & Importance	2	32
Daily Quiz	Daily Quiz	The Democratic Experience in Iraq after 2003	Concept & Importance	2	33
Q&A	Q&A	Civil Society and Pressure Groups (Continued)	Concept & Importance	2	34

11. Course Evaluation

1. First Semester Exam: Monthly Exam + Daily Quiz (25 Degrees)
2. Second Semester Exam: Monthly Exam + Daily Quiz (25 Degrees)
3. Final Exam: (25 Degrees)

Learning and Teaching Resources

Human Rights and Democracy: A Curriculum for First-Year Students in Iraqi Universities.	Required Textbook
Dr. Musaddaq Adel Talib, Dr. Adnan Aajel Obaid, Dr. Ayat Salman Shuhaib, Dr. Mohammed Oudah Mohsen, Dr. Abbas Atiyah Abdul Al-Quraishi: Human .Rights Curriculum	Main References
Dr. Muntaser Majeed Hameed, Dr. Yasser Ali Ibrahim, Dr. Kadhim Ali Mahdi, Dr. Ahmed Yahya Hadi, Dr. Ihsan Mohammed Hadi, Dr. Anwar Saeed Jawad: .Democracy Curriculum	Supporting References

Course Description Form

1. Course Information
Human Rights and Democracy
2. Course Code
107
3. Semester / Year: Annual
2025-2026
4. Date of Preparation:
20-11-2025
5. Attendance Form
In-person (Mandatory)
6. Total Credit Hours / Units:
60 Hours / 2 Units
7. Course Coordinator:
Asst. Lect. Nihad abdullah mahmood nihad.A.mahmood@tu.edu.iq
8. Course Objectives

Course objectives	▪ Preparing a conscious generation aware of human rights and public freedoms. ▪ Developing cultural levels and increasing student awareness. ▪ Keeping students updated with other nations' experiences in human rights. ▪ Familiarizing students with key international conventions, treaties, and instruments. ▪ Informing students about constitutional articles guaranteeing rights and freedoms. ▪ Educating students on their rights, freedoms, protection methods, and limits. ▪ Understanding the role of education in spreading the culture of democracy and good governance. ▪ Encouraging active participation in governance through free and fair elections.

	▪ Developing analytical and critical skills regarding the future of human rights.

9. and Learning Strategies

Teaching	▪ Direct lecture delivery method. ▪ Student groups and collaborative learning. ▪ Workshops. ▪ Reports and research studies. ▪ Use of illustrative aids and visual tools. ▪ Attendance and physical presence tracking. ▪ Role-playing strategies within the classroom. ▪ Writing analytical papers related to human rights and democracy topics.

10. Course Structure (Weekly Plan(

Week	Hours	Learning Outcomes	Unit/Topic Title	Teaching Method	Assessment Method
1	2	& Concept Importance	Concept of Human Rights and the International Bill of Rights	Q&A	Q&A
2	2	& Concept Importance	Human Rights Definition and National Implementation Mechanisms	Oral Questions	Oral Questions
3	2	& Concept Importance	Concept of the International Bill of Human Rights	Daily Quiz	Daily Quiz

4	2	& Concept Importance	Categorical and Special Rights	Q&A	Q&A
5	2	& Concept Importance	,Rights of Women Children, Minorities, and Persons with Disabilities	Written Exam	Written Exam
6	2	& Concept Importance	National Procedures for Implementing Special or Categorical Rights	Q&A	Q&A
7	2	& Concept Importance	Grave Violations of Human Rights	Interrogation	Interrogation
8	2	& Concept Importance	Combating Grave Violations of Human Rights	Discussion	Discussion
9	2	& Concept Importance	International & Humanitarian Law Human Rights in Conflict	Interrogation	Interrogation
10	2	& Concept Importance	Grave Violations of Human Rights in Iraq	Q&A	Q&A
11	2	& Concept Importance	Human Rights Council Universal Periodic & (Review (UPR	Q&A	Q&A
12	2	& Concept Importance	International/Regional Protection Mechanisms Accountability &	Oral Questions	Oral Questions

13	2	& Concept Importance	Contemporary Challenges in Human Rights	Daily Quiz	Daily Quiz
14	2	& Concept Importance	Challenges Facing Human Rights	Q&A	Q&A
15	2	& Concept Importance	National and Procedural Mechanisms to Enhance Rights	Written Exam	Written Exam
16	2	& Concept Importance	Democracy: Historical Origins and Evolutionary Path	Q&A	Q&A
17	2	& Concept Importance	Historical Concepts of Democracy's Emergence Foundations &	Interrogation	Interrogation
18	2	& Concept Importance	Evolution of Democracy in the Modern Era and its Correlates	Discussion	Discussion
19	2	& Concept Importance	Democracy in the 20th Century: Totalitarianism vs. Expansion	Interrogation	Interrogation
20	2	& Concept Importance	Patterns of Democracy in Contemporary Contexts	Q&A	Q&A
21	2	& Concept Importance	Islam and Democracy	Q&A	Q&A
22	2	& Concept	Institutions and Mechanisms of	Oral	Oral Questions

		Importance	Democracy	Questions	
23	2	& Concept Importance	Separation of Powers and Democratic Governance Principles	Daily Quiz	Daily Quiz
24	2	& Concept Importance	Elections as a Mechanism for Democracy	Q&A	Q&A
25	2	& Concept Importance	Political Parties	Written Exam	Written Exam
26	2	& Concept Importance	Civil Society and Pressure Groups	Q&A	Q&A
27	2	& Concept Importance	Relations between Democracy and Public Movements	Interrogation	Interrogation
28	2	& Concept Importance	Guarantees of Rights and Freedoms in Democratic Systems	Discussion	Discussion
29	2	& Concept Importance	Media and Democracy	Interrogation	Interrogation
30	2	& Concept Importance	Democratic Systems and Comparative Studies	Q&A	Q&A
31	2	& Concept Importance	Democracy in the :Developing World Challenges & Models	Q&A	Q&A

32	2	& Concept Importance	Digital Transformation in Democratic Practice	Oral Questions	Oral Questions
33	2	& Concept Importance	The Democratic Experience in Iraq after 2003	Daily Quiz	Daily Quiz
34	2	& Concept Importance	Civil Society and Pressure Groups (Continued)	Q&A	Q&A

11.Course Evaluation

1. First Semester Exam: Monthly Exam + Daily Quiz (25 Degrees)
2. Second Semester Exam: Monthly Exam + Daily Quiz (25 Degrees)
3. Final Exam: (25 Degrees)

Learning and Teaching Resources

Required Textbook	Human Rights and Democracy: A Curriculum for First-Year Students in Iraqi .Universities
Main References	,Dr. Musaddaq Adel Talib, Dr. Adnan Aajel Obaid, Dr. Ayat Salman Shuhaib Dr. Mohammed Oudah Mohsen, Dr. Abbas Atiyah Abdul Al-Quraishi: Human .Rights Curriculum
Supporting References	,Dr. Muntaser Majeed Hameed, Dr. Yasser Ali Ibrahim, Dr. Kadhim Ali Mahdi :Dr. Ahmed Yahya Hadi, Dr. Ihsan Mohammed Hadi, Dr. Anwar Saeed Jawad .Democracy Curriculum

Course description form

.1 **Course Name:**	
General chemistry theory	
.2 **Course Code**	
104 BGC	
.3 **Term/Year: Annual**	
Annual	
.4 **Date this description was prepared**	
2025-2026	
.5 **Available forms of attendance:**	
Daily	
.6 **Total study hours / Total number of units:**	
hour 60	
.7 **Name of the course coordinator (if there is more than one name mention it).**	
the name:Ahmed Abdul Hussein Qanbar **Email: ahmed.abd.tuz.@tu.edu.iq**	
.8 **Course Objectives**	
1. Explaining the concept of chemistry **2. Explaining mathematical problems related to expressing concentrations** **33. Providing a detailed explanation of organic chemistry with sufficient examples of chemical equations to illustrate single, double, and triple bonds**	
.9 **Teaching and learning strategies**	
1- Direct explanation and lecturing, using the board to solve mathematical problems, followed by student discussion of the problems through: **Student participation in solving mathematical problems on the board during the explanation of the scientific material.** **3- Discussion of some chemical terms with the students.**	**1-**

.10 **Course Structure**

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	week

1	2	Introducing the student to the science of chemistry		blackboard	Daily quizzes with participation in solving math problems on the board

11. Course Evaluation	
Midterm and final exams Daily quizzes and student participation in questions posed during class	
12. Learning and teaching resources	
Required textbooks (methodology, if applicable)	
Main references (sources)	ssistant Professor Dr. Elham Nghimish azal Hussein, Analytical Chemistry for First-Year Students Dr. Layla S. Al-Omran, Department of nemistry, College of Science, University of Basrah
Recommended supporting books and references (scientific journals, reports...)	Concise Guide to Solving Quantitative Analytical Chemical Problems by ofessor Dr. Munther Salim Abdul Latif
Electronic references, websites	Organic Chemistry for First-Year Students, Prof. Dr. Abdullah Hussein Kashash

Course Description Form

2. Course Name:		1.
Biochemistry		
4. Course Code:		3.
6. Chapter/Year:		5.
Annual		
8. Date this description was prepared		7.
2026/1/12		
10. Available Attendance Forms:		9.
Attending Lectures		
12. Number of Hours (Total) / Number of Units (Total):		11.
1 Theoretical + 2 Practical Hours		
14. Course administrator name (if more than one name mentioned)		13.
Mateen A. Mehdi Mateen.a.mehdi@tu.edu.iq		
16. Course Objectives		15.
	• Learns buffer solutions and their role in biological reactions – the role of the cell. • Understand the role, structure, and function of the main sources of energy in the body (carbohydrates, fats, and proteins). • Understand the role and function (enzymes, hormones, nucleic acids, vitamins) within the body. • Understanding the relationship between energy sources	•
18. Teaching and Learning Strategies		17.
	Theoretical Lectures, Practical Application, Lectures Electronic, Daily Exams, Monthly Exams.	
20. Course Structure		19.

Evaluation Method	Learning method		Unit Name or Subject	Required Learning Outcomes	Watches	The week
Daily exams and monthly	Lecture		Biomolecules Mission and Buffer Solutio	Analysis, Application, Understanding	1Theoretical 2 Practical	First week Second week
Daily and Monthly Exams	Lecture		Carbohydrates Know it - its functions and structures	Analyze, Apply Understand	1 Theoretical 2 Practical	Third week fourth week
Daily and Monthly Exams	Lecture		Varieties All Carbohydra	Analyze, Apply Understand	1 Theoretical 2 Practical	Fifth week Six Week
Daily and Monthly Exams	Lecture		Amino acids - their definition - properties - and their types	Analyze, Apply Understand	1 Theoretical 2 Practical	Seventh week eighth week
Daily and Monthly Exams	Lecture		Peptides and proteins	Analyze, Apply Understand	1 Theoretical 2 Practical	Week Ninth Tenth week

Daily and Monthly Exams	Lecture		Fats Definition, Types and Functions	Analyze, Apply Understand	1 Theoretical 2 Practical	Week Eleven Twelfth week
Daily and Monthly Exams	Lecture		Enzymes Defin by Categories Factors Theorie	Analyze, Apply Understand	1 Theoretical 2 Practical	Thirteenth we fourteenth we
Daily and Monthly Exams	Lecture		Nucleic acids Definition – Composition Its function and its vital role	Analyze, Apply Understand	1 Theoretical 2 Practical	week fifteen week sixteen
Daily and Monthly Exams	Lecture		Hormones - Methods of Measurement - Function - and Detection	Analyze, Apply Understand	1 Theoretical 2 Practical	week seventee week eighteen
Daily and Monthly Exams	Lecture		Types of hormones and their regulatory role	Analyze, Apply Understand	1 Theoretical 2 Practical	Week Nineteen Twentieth we
Daily and Monthl	Lecture		Vitamins – thei definition, function, types, and diseases	Analyze, Apply Understand	1 Theoretical 2 Practical	The twentiet h week Week 22

y Exams			resulting from their deficiency			

22. Course Evaluation	21.
Distribution of the score out of 100 according to the tasks assigned to the student, such as daily preparation, daily, oral, monthly, written exams, reports... etc.	

24. Learning and Teaching Resources		23.
Introduction to Biochemistry Dr. Khawla Al Falih	Required Textbooks (Methodology, if any)	
Principles of Lingerie Biochemi	Main References (Sources)	
Journals specialized in biochemi and books in the field biochemistry	Recommended books and references (scientific journals, reports…)	
Google scholar , NCBI, MCQ in Biochemistry , Lehninger principles of biochemistry Harpers illustrated Biochemistry	Electronic References, Websites	

Course Description Form

1. Course name:	
General Chemistry Practical	
2. Course code:	
104BGC	
3. Semester/Year: Annual	
Annual	
4. Date this description was prepared	
2025/11/1	
5. Available attendance forms:	
Daily	
6. Number of study hours (total) / Number of units (total):	
60 hours / 4 unit	
7. Name of the course administrator (if more than one name is mentioned)	
the name: Haider Mahdi Ahmed Email:haider.m.ahmed@tu.edu.iq	
8. Course objectives	
	1- Understand and comprehend the material General Chemistry Practical. 2- Dealing with Chemical experiments in the field of analytical and organic. 3- Understanding methods and techniques To prepare standard solutions solid and liquid substances

9. Teaching and learning strategies	
	1- Explaining the scientific material to students in detail. **2- Student participation in Work to prepare standard solutions in analytical and organic chemistry** **3- Discussion and dialogue on vocabulary related to the topic.**

Course structure ١٠.

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
Daily exams And homework In addition to Exams Monthly	The blackboard What is your data?	Terminology for some laboratory tools and glassware used in experiments	Introducing the student to some laboratory tools and glassware	2	١
=	=	Introduction to Chemistry Membership	Student definition In organic chemistry Its importance in our lives	2	٢
=	=	Crystallization	Student definition of crystallization	2	٣
=	=	melting point	Student definition Melting point	2	٤
=	=	And boiling	Student definition boiling	2	٥

=	=	Distillation and its types	Introducing the student to distillation and explaining it Its types	2	٦
=	=	Extraction	Introducing the student to extraction	2	٧
=	=	Aspirin preparation	Detailed explanation of how Aspirin preparation	2	٨
=	=	eparation of salicylic acid from aspirin	Detailed explanation of how Preparation of salicylic acid aspirin	2	٩
=	=	Acid hydrolysis of acetylsalicylic acid	Detailed explanation of decomposition acidic water acid Acetylsalicylate	2	١٠
=	=	Alcohol detection	Student definition of Alcohol Tests	2	١١
=	=	Detection of aldehydes	Student definition of aldehyde detection	2	١٢
=	=	Ketone detection	Student definition of statements Ketones	2	١٣
=	=	Introduction to Chemistry Analytical	Introducing the student to chemistry Analytical and its types	2	١٤

=	=	Correction	Introducing the student to correction	2	١٥
=	=	Methods of expressing solution concentrations in analysis and quantitative calculations related to volumetric analysis	Introducing the student to volumetric analysis	2	١٦
=	=	Prepare a solution of a solid substance of sodium chloride salt at a concentration of 0.5 M and size 500 ml	Detailed explanation of how to prepare Standard solution of a solid	2	١٧
=	=	Prepare a solution of a liquid substance of concentrated hydrochloric acid at a concentration of 0.12 N and 250 ml volume	Detailed explanation of how Preparing a standard solution of a liquid substance	2	١٨
=	=	Volumetric analysis reactions	Student definition Volumetric analysis reactions	2	١٩
=	=	Prepare a solution0.1 N of hydrochloric acid and titrate it with a standard solution of carbonate. Sodium	Detailed explanation of how Hydrochloric preparation And calibrate it with a solution Standard carbonate Sodium	2	٢٠

=	=	Prepare a solution0.1 N of NaOH and its comparison with a standard solution of HCl	etailed explanation of how Hydroxide preparation Sodium from solution Standard Hydrochloric	2	٢١
=	=	Complex formation reactions	Introducing the student to interactions Complex Formation	2	٢٢
=	=	Set vinegar quality	Student definition of appointment Vinegar quality	2	٢٣
=	=	Estimation of water hardness	Student definition of appreciation Hardness in water	2	٢٤

١١. Course Evaluation

1. **Daily tests with multiple choice questions that require scientific skills.**
2. **Participation scores for competition questions for academic topics**
3. **Grading homework**
4. **Practical tests**
5. **Reports and studies**

١٢. Learning and teaching resources

	Required Textbooks (Methodology if any)
1.Skoog DA, West DM, Holler FJ and Crouch SR 2013. Fundamentals of analytical chemistry, Nelson Education. **2.John H. Kennedy1991. Fundamentals of Practical Analytical Chemistry. Translated by Sarmed Bahjat Dikran and NabilAdel Fakhry. University of Salahaddin.** **3.March's 2007 Advanced Organic Chemistry: Reactions, Mechanisms, and Structure, Sixth Edition (March's Advanced Organic Chemistry) P.2,377.** **4.Hanan Abdel Jalil Rady, Mohamed Ahmed Abdel.2004 Practical Organic Chemistry. University of Basra**	**Main References (Sources)**
WWW.chemicalprocessing.com	**Recommended supporting books and references (scientific journals, reports, etc.)**
https://learnchemistry12.com/	**Electronic ferences, websites**

نموذج وصف المقرر

1. اسم المقرر:	
تشريح النبات	
2. رمز المقرر:103BPA	
3. 103BPA	
4. الفصل / السنة:	
السنوي	
5. تاريخ إعداد هذا الوصف 28/3/2026	
10/10/2024	
6. أشكال الحضور المتاحة:	
الحضور اليومي	
7. عدد الساعات الدراسية (الكلي)/ عدد الوحدات (الكلي):	
30 ساعة	
8. اسم مسؤول المقرر الدراسي (اذا اكثر من اسم يذكر)	
الاسم: أ.م.د. احسان عبد العزيز عبد الرحيم الايميل:ihsan.abdulazez@tu.edu.iq	
9. اهداف المقرر	
تعريف الطلبة بمادة تشريح النبات الخلية ومحتوياتها الحية والغير حية النقر النسيج البارنكيمي النسيج الكولونكيمي النسيج السكلرنكيمي الأنسجة الدائمة نظريات القمة النامية نسيج الخشب نسيج اللحاء النباتات المائية النباتات الصحراوية	
10. استراتيجيات التعليم والتعلم	
الأهداف المعرفية	١ـ ما هو تعريف تشريح النبات ٢ـ ما هي أنواع الأنسجة النباتية ٣ـ ما هي فوائد كل نسيج للنبات ٤ـ اجزاء كل نسيج نباتي

الأهداف المهارية الخاصة بالمقرر	٥- المحتويات الحية والغير حية داخل الخلية النباتية ١- ان يتعلم الطالب تشريح النبات ٢- ان يتعلم الطالب التعرف على الأجزاء النباتية الداخلية ٣ تكليف الطالب بعمل سلايدات لكل جزء نباتي ١- تمكين الطلبة المعرفة العلمية والعملية ٢- تمكين الطلبة من الإجابة على الاسئلة
الأهداف الوجدانية والقيمة	1- تكليف الطلبة بعمل تقارير عن الادة 2- تكليف االطلبة بالحصول على بيانات علمية من مص خارجية 3- تعليم الطلبة على الاجابة على الاسئلة المتعلقة بالمادة

11. بنية المقرر

الأسبوع	الساعات	مخرجات التعلم المطلوبة	اسم الوحدة او الموضوع	طريقة التعلم	طريقة التقييم
1-2	2	الخلية النباتية	الخلية النباتية	المحاضرة والمناقشة	السؤال والجواب
3-4	2	المحتويات الحية داخل الخلية			
6-5	2	المحتويات الغير حية داخل الخلية النباتية	مكونات الخلية النباتية	المحاضرة والمناقشة	السؤال والجواب
8-7	2	النسيج البارنكيمي	الانسجة النباتية	المحاضرة والمناقشة	لسؤال والجواب
10-9	2	النسيج الكولنكيمي	الانسجة النباتية	المحاضرة والمناقشة	السؤال والجواب
12-11	2	النسيج السكلرنكيمي	الانسجة النباتية	المحاضرة والمناقشة	السؤال والجواب
14-13	2	نظريات القمة النامية	الانسجة النباتية	المحاضرة والمناقشة	السؤال والجواب

16-15	2	الكامبيوم الفليني	الانسجة النباتية	المحاضرة والمناقشة	السؤال والجواب
18-17	2	النسيج الفليني اجزاءه	الانسجة النباتية	المحاضرة والمناقشة	السؤال الجواب
20-19	2	نسيج الخشب	الانسجة النباتية	المحاضرة و المناقشة	السؤال والجواب
22-21	2	نسيج الخشب بالتفصيل(النباتات ذوات الفلقة الواحد والفلقتين)	الانسجة النباتية	المحاضرة و المناقشة	السؤال و الجواب
24-23	2	نسيج اللحاء	الانسجة النباتية	المحاضرة و المناقشة	السؤال والجواب
26-25	2	الجذر	الانسجة النباتية	المحاضرة و المناقشة	السؤال والجواب
28-27		الورقة النباتية +الساق	الانسجة النباتية	المحاضرة	السؤال والجواب
30-29		النباتات الصحراوية	الانسجة النباتية	المحاضرة	السؤال والجواب

12. تقييم المقرر

الامتحان اليومي والامتحان الشهري

13. مصادر التعلم والتدريس	
الكتب المقررة المطلوبة (المنهجية أن وجدت)	المحاضرات مطبوعة
المراجع الرئيسة (المصادر)	المصادر
الكتب والمراجع الساندة التي يوصى بها (المجلات العلمية، التقارير....)	المجلات العلمية
المراجع الإلكترونية ، مواقع الانترنيت	مواقع الانترنيت

Course description form

1. Course Name	
Practical Biochemistry	
2. Course code:	
219BBI	
3. Term/Year:	
Annual	
4. This description was prepared at the beginning of the academic year.	
2026-2025	
5. Available forms of attendance:	
The presence	
6. Total study hours / Total number of units:	
hours	
7. Name of the course coordinator (if there is more than one, mention it)/	
Ahmed Abdul Hussein Qanbar Email:ahmed.abd.tuz@tu.edu.iq	
8. Course Objectives	
	1. Carbohydrates: Identifying the different types of carbohydrate reactions. **2. Fats: Identifying the types of fats (saturated, unsaturated).** **3. Proteins: Identifying proteins and their types (simple, complex).** **4. Enzymes: Understanding the nature of enzymes and their role as catalysts for biochemical reactions.**
9. Teaching and learning strategies	
gnitive objectives	Carbohydrates: Students will learn about their importance in detecting polysaccharides. Lipids: Students will explain the role of lipids in saponification reactions and in tests for fatty acids. Proteins: Students will explain the role of roteins in detecting amino acids. Enzymes: Students will learn about the nature of nzymes and their biological activity. Carbohydrates: Students will pay attention to observing color changes during experiments and handle chemicals carefully.
Affective and value-based objectives.	Students will develop a sense of responsibility when measuring samples and analyzing results. ppreciate the importance of carbohydrates in daily life and the energy they provide to the body.

2. Fats

Respect the steps of the experiment and avoid rushing to prevent errors.

Appreciate the role of fats in nutrition and health by observing their practical properties.

Develop patience and attentiveness while conducting fat detection tests.

3. Proteins

Pay close attention to changes in color and clumping during tests.

Develop an understanding of the importance of protein in building and maintaining the body and tissues.

Respect safety rules when handling chemicals.

4. Enzymes

Develop scientific curiosity to understand how enzymes work in the body and in food.

Pay attention to recording results and accurately observing the effect of different factors on enzyme activity.

Develop a sense of responsibility for conducting scientific experiments correctly and objectively.

Course Structure .10

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	week
Delivering the lecture directly and discussing it practically, if the materials for the subject to be revealed are available.	The whiteboard is used to illustrate important points, whether through drawings or diagrams.	Carbohydrates	define carbohydrates. To list the types of carbohydrates. To list the reactions of carbohydrates with non-oxidizing acids. To explain carbohydrate detection methods such as the Müllerian, Biel, and Silvanov tests. To demonstrate the reactions of aldehyde and ketone groups and the detection of polysaccharides, such as starch hydrolysis and blood glucose analysis.		
=	=	Lipeds	It provides a scientifically accurate definition of fats. It explains the different types of fats.		

			It demonstrates the analysis of fatty acids. It explains how soap reacts. It demonstrates the analysis of cholesterol and blood lipids.		
=	=	Proteins	To identify and classify the types of amino acids. To demonstrate the detection of amino acids, chromatography, and methods of protein precipitation.		
=	=	Enzymes	Define enzymes scientifically and correctly. List the types of enzymes and their basic functions. Explain the nature of an enzyme, such as catalase, and its biological activity.		
Course Assessment Methods .11					
Written tests: Multiple-choice, true/false, and short-answer questions. **Practical projects: Such as creating a balanced daily meal plan.**					

Practical observations: Observing the student's ability to classify foods and apply knowledge practically.	
Learning and teaching resources .12	
Lectures are printed	Required textbooks (methodology, if applicable)
Dr. Sami Al-Mudhaffar	Physiological biochemistry
Dr. Talal Al-Najafi	Biochemistry book
Dr. Khawla Al-Faleh	Introduction to Biochemistry
Lippincott biochemistry	External sources
Lehninger pinciples of biochemistry	

Subject Teacher: Assistant Teacher Ahmed Abdel-Haybin Qanbar