Academic Program Description

University Name: University Of Anbar

Faculty/Institute: Education College for Women

Scientific Department: ... Department of Biology

Academic or Professional Program Name: .... Bachelor of Biology

Final Certificate Name: Bachelor of Biology

Academic System: ... Semester

Description Preparation Date: 16–9–2025

File Completion Date: 16–9–2025

Signature:

Head of Department Name:

Dr. Nedhal Ibrahim Lateff

Date: 16/9/2025

Signature:

Scientific Associate Name:

Dr. Omar Hazem Ismail

Date: 16/9/2025

The file is checked by:

Department of Quality Assurance and University Performance

Director of the Quality Assurance and University Performance

Department: Prof . Dr. Ahmed Abd El –Sattar

Date: 16/9/2025

Signature:

Approval of the Dean

أ.د. نصرة أحمد جدو
العميد

Academic Program Description 2025

1. Program Vision
Leadership in higher education and scientific research, and the development of the academic program to achieve sustainable community development. The College of Education for Women seeks to prepare graduates in the field of education to work in government institutions and benefit from specialization in both scientific and applied fields.

2. Program message
Excellence in the quality of higher education and scientific research by adopting analytical and critical thinking strategies to develop human resources cognitively, intellectually, and skillfully in a competitive and creative environment. We work to prepare pioneering scientific and leadership competencies in the field of education and to develop the knowledge base in scientific research across various disciplines to serve the local, regional, and international community. We also train and refine students' minds scientifically and intellectually, emphasize social and cultural values, and respond to the requirements of the local market through the following: -1 Community Service: By strengthening relationships with state institutions that benefit from our department's scientific specializations, we present applied research and hold scientific seminars and workshops inside and outside the department. 2 -Scientific Research: Scientific research is active in the department through the participation of faculty members and undergraduate and graduate students in conducting research in various disciplines and publishing research findings to contribute to community development in scientific fields and raise the global ranking of our college in particular and our university in general. -3 The Educational Process: Providing a good educational and pedagogical environment for students and supporting and assisting them. In their field of study, arming them with knowledge and science, raising their intellectual level and scientific abilities, and allowing them to bear responsibility.

3. Program objectives

1 . Raising the level of scientific knowledge by developing the infrastructure at the educational and research levels and excelling in the teaching and learning strategy across all academic programs.

2. Developing academic programs, updating their outcomes, and promoting a culture of sustainable learning, which contributes to enhancing students' personal, social, academic, and professional capabilities and skills, with the goal of improving the standard of living for society and achieving sustainable development goals.

3. Fulfilling the requirements of social responsibility and achieving an influential presence in community events and activities as a path to social, cultural, scientific, and economic progress.

4. Adopting the highest standards of evaluation in the institutional and programmatic fields, with the goal of achieving comprehensive quality management requirements and improving the university's position in local and academic rankings.

5. Creating an environment for constructive and productive competition in the field of innovation and scientific research, and enhancing the output of applied research that addresses societal problems.

6. Preparing graduates with advanced theoretical and practical skills in the field of life sciences to keep pace with scientific developments and serve society.

7. Providing graduates with applied and practical scientific skills and the use of modern teaching methods.

8. Preparing graduates with a high level of proficiency in the field of life sciences to meet the needs of society and contribute to the development of a distinguished generation.

4. Program accreditation

nothing

5. Other external influences

nothing

6. Program structure				
Notes*	**Percentage**	**Unit**	**Number of courses**	**Program structure**
لا يوجد	%9.2	13	6	Institutional Requirements
	%23.0	25	15	College Requirements
	%60	107	39	Department Requirements
	%3	3	2	Summer Training
				Other

* Notes may include whether the course is core or elective.

Number of hours for (theoretical) courses = 105 and (practical) courses = 88 for four levels

Number of hours for specialized courses (theoretical) = 69 and (practical) = 70

Number of hours for educational subjects (theoretical) = 18 (practical) = 12

	7. Program structure				
Credit Units	Credit hours		**Course Name**	**Course code**	**Level/year**
	Practical	Theoretical	First Semester	**First academic year**	
3	**2**	**2**	**General Biology 1**	**EWb3103**	First **/2025-2024**
3	**2**	**2**	**Cell Biology 1**	**EWb3101**	First **/2025-2024**
3	**2**	**2**	**General Chemistry 1**	**EWb3105**	First **/2025-2024**
2	**2**	**1**	**Plant Anatomy 1**	**EWb3203**	First **/2025-2024**
2	**0**	**2**	**Educational Psychology**	**Ewb 2101**	First **/2025-2024**
2	**0**	**2**	**Arabic Language**	**Ewb 1102**	First **/2025-2024**
1	**0**	**1**	**Democracy and Human Rights**	**Ewb1101**	First**/2025-2024**
2	**2**	**1**	**Psychology of Classroom Education**	**Ewb1101**	First **/2025-2024**
18	**10**	**13**	**Total Credit Units**		
Credit Units	Practical	Theoretical	Second semester	**First academic year**	
3	**2**	**2**	**General Biology 2**	**EWb3104**	First **/2025-2024**
3	**2**	**2**	**Cell Biology 2**	**EWb3102**	First **/2025-2024**
3	**2**	**2**	**General Chemistry 2**	**EWb3107**	First **/2025-2024**
2	**2**	**1**	**Plant Anatomy 2**	**EWb3203**	First **/2025-2024**
2	**0**	**1**	Principles of Education and Teaching		First **/2025-2024**
1	**0**	**1**	**Earth Science**	**EWb3106**	First **/2025-2024**
2	**0**	**2**	**English Language 1**	**EWb1104**	First**/2025-2024**
2	**2**	**1**	**Computer Science**	**EWb2103**	First **/2025-2024**
18	**10**	**12**	**Total Credit Units**		
Credit Units	**Practical**	Theoretical	First Semester	**The second stage**	
3	**2**	**2**	Invertebrates 1	**EWb3201**	second**/2025-2024**
3	**2**	**2**	Histology 1	**EWb3205**	second **/2025-2024**

3	**2**	**2**	Plant Taxonomy 1	**EWB3210**	**second** /2025-2024
3	**2**	**2**	Embryology 1	**EWB3209**	**second** /2025-2024
1	**0**	**1**	Educational Planning	**EWb2201**	**second** /2025-2024
1	**0**	**1**	Biostatistics 1	**EWB3208**	**second** /2025-2024
2	**2**	**1**	Biochemistry 1	**EWB3207**	**second** /2025-2024
2	**0**	**2**	Developmental Psychology	**EWb2202**	**second** /2025-2024
1	**0**	**1**	Crimes of the Baath Party in Iraq		**second** /2025-2024
2	**0**	**2**	Arabic Language	**Ewb 1202**	**second** /2025-2024
2	2	-	Computer Science		**second** /2025-2024
23	**12**	**16**	**Total Credit Units**		
Credit Units	**Practical**	Theoretical	**Second semester**	**The second stage**	
3	**2**	**2**	Invertebrates 2	**EWb3201**	**second** /2025-2024
3	**2**	**2**	Histology 2	**EWb3205**	**second** /2025-2024
3	**2**	**2**	Plant Taxonomy 2	**EWB3210**	**second** /2025-2024
3	**2**	**2**	Embryology 2	**EWB3209**	**second** /2025-2024
1	**0**	**1**	Professional Ethics in Education		**second** /2025-2024
1	**0**	**1**	Biostatistics 2	**EWB3208**	**second** /2025-2024
2	**2**	**1**	Biochemistry 2	**EWB3207**	**second** /2025-2024
1	0	1	Educational Leadership and Management	**EWb2203**	**second** /2025-2024
2	**0**	**2**	English Language	**EWb3204**	**second** /2025-2024
2	**2**	**1**	Educational Technology		**second** /2025-2024
21	**12**	**15**	**Total Credit Units**		
Credit Units	**Practical**	Theoretical	**First Semester**	Third Year	
3	**2**	**2**	Microbiology 1	**EWB3305**	Third **/2025-2024**
3	**2**	**2**	Chordates and Comparative	**EWB3301**	Third **/2025-2024**

			Anatomy 1		
3	**2**	**2**	Genetics 1	**EWB3303**	Third **/2025-2024**
3	**2**	**2**	General Entomology 1	**EWB3302**	Third **/2025-2024**
3	**2**	**2**	Algae	**EWB32O6**	Third **/2025-2024**
3	**2**	**2**	Environment and Pollution 1	**EWB3408**	Third**/2025-2024**
1	**0**	**1**	Teaching Methods for Students with Special Needs		Third**/2025-2024**
19	**12**	**13**	**Total Credit Units**		
Credit Units	**Practical**	Theoretical	**Second semester**	Third Year	
3	**2**	**2**	Microbiology 2	**EWB3305**	Third **/2025-2024**
3	**2**	**2**	Chordates and Comparative Anatomy 2	**EWB3301**	Third **/2025-2024**
3	**2**	**2**	Genetics 2	**EWB3303**	Third **/2025-2024**
3	**2**	**2**	General Entomology 2	**EWB3302**	Third **/2025-2024**
3	**2**	**2**	Archaeobacteria	**EWB32O6**	Third **/2025-2024**
3	**2**	**2**	Environment and Pollution 2	**EWB3408**	Third **/2025-2024**
1	**0**	**1**	Thinking Skills and Scientific Research Foundations		Third **/2025-2024**
2	**2**	**1**	Teaching Methods 1	**EWB2302**	Third **/2025-2024**
21	**14**	**14**	**Total Credit Units**		
Credit Units	**Practical**	Theoretical	**First Semester**	Fourth Year	
3	**2**	**2**	Animal Physiology	**WEB3312**	**Fourth** /2025-2024
3	**2**	**2**	Plant Physiology	**EWB3405**	**Fourth** /2025-2024
3	**2**	**2**	Parasitology	**EWB3401**	**Fourth** /2025-2024
3	**2**	**2**	Mycology	**EWB3309**	**Fourth** /2025-2024
3	**2**	**2**	Immunology	**EWB3409**	**Fourth** /2025-2024

1	**0**	**1**	Sustainable Environment		**Fourth** /2025-2024
2	**2**	**1**	Curriculum and School Textbooks		**Fourth** /2025-2024
2	**0**	**2**	Research Project		**Fourth** /2025-2024
2	**0**	**2**	Practical Teaching 1		**Fourth** /2025-2024
24	**12**	**18**	**Total Credit Units**		
Credit Units	**Practical**	Theoretical	**Second semester**	Fourth Year	
2	**0**	**2**	Research Project 2		Fourth **/2025-2024**
1	**2**	**0**	Practical Teaching 2		Fourth **/2025-2024**
2	**2**	**1**	Teaching Methods 2	**EWB2302**	Fourth **/2025-2024**
2	**2**	**1**	Action Research		
7	**6**	**4**	**Total Credit Units**		

8. Expected Learning Outcomes of the Program	
Knowledge	
	• To possess broad and detailed knowledge in the fields of medicine, health, agriculture, food industries, and the natural and ecological systems. • To have extensive understanding of biological, genetic, and life science concepts and principles. • To be capable of accurate analysis, differentiation, and diagnosis in laboratory-based biological field
Skills	
	• Ability to comprehend life sciences and apply them practically. • Ability to manage crises and problems and propose appropriate solutions. • Ability to build a solid scientific foundation in the field of life sciences.
Values	

	• Developing students' abilities to share scientific and practical ideas and skills.

9.Teaching and Learning Strategies
Detailed explanation of the scientific material. Developing the ability to utilize the Internet to research certain topics covered in the scientific material. Using educational videos, illustrative images, and digital files as alternatives to printed textbooks.

10. Assessment Methods
- **Daily quizzes** - **Various assignments** - **Midterm exams** - **Questions and discussions**

11. Faculty members

Faculty members						
Faculty Preparation		Special Requirements/Skills ((if any		**Specialization**		**Academic Rank**
Lecturer	Permanent Member			**specific**	General	
	3				Biology	Professor
	11				Biology	Assistant Professor
	11				Biology	Lecturer
	19				Biology	Assistant Lecturer
	3				Biology	Researcher

Professional Development
Orientation of New Faculty Members
Holding periodic meetings for new faculty members and conducting workshops and development courses
Professional Development for Faculty Members

12.Admission Criteria
The department's admission system is (central, parallel, evening) admission.

13.The most important sources of information about the program

14.Program Development Plan
Using new concepts in the field of life sciences and utilizing electronic devices and the Internet to develop and deliver scientific material to students.

Program Skills Map															
Required learning outcomes of the program															
Values				Skills				Knowledge				**Basic or optional**	**Course Name**	**Course Code**	Year/level
C **4**	C **3**	C **2**	C **1**	B **4**	B **3**	B **2**	B **1**	A **4**	A **3**	A **2**	A **1**				
			/				/				/	Basic	General Biology 1	**EWb3103**	**-2024 /2025** First
			/				/				/	Basic	Cell Biology 1	**EWb3101**	**-2024 /2025** First
			/				/				/	Basic	General Chemistry 1	**EWb3105**	**-2024 /2025** First
			/				/				/	Basic	Plant Anatomy 1	**EWb3203**	**-2024 /2025** First
			/				/				/	Basic	Educational Psychology	**Ewb 2101**	**-2024 /2025** First
			/				/				/	Basic	Arabic Language	**Ewb 1102**	**-2024 /2025** First
			/				/				/	Basic	Democracy and Human Rights	**Ewb1101**	**-2024 /2025** First
			/				/				/	Basic	Psychology of Classroom Education	**Ewb1101**	**-2024 /2025** First
			/				/				/	Basic	General Biology 2	**EWb3104**	**-2024 /2025** First

			/				/				/	Basic	Cell Biology 2	**EWb3102**	**-2024 /2025** First
			/				/				/	Basic	General Chemistry 2	**EWb3107**	**-2024 /2025** First
			/				/				/	Basic	Plant Anatomy 2	**EWb3203**	**-2024 /2025** First
			/				/				/	Basic	Principles of Education and Teaching		**-2024 /2025** First
			/				/				/	Basic	Earth Science	**EWb3106**	**-2024 /2025** First
			/				/				/	Basic	English Language 1	**EWb1104**	**-2024 /2025** First
			/				/				/	Basic	Computer Science	**EWb2103**	**-2024 /2025** First
			/				/				/	Basic	Invertebrates 1	**EWb3201**	**-2024 /2025** second
			/				/				/	Basic	Histology 1	**EWb3201**	**-2024 /2025** second
			/				/				/	Basic	Plant Taxonomy 1	**EWb3205**	-2024 /2025 **second**
			/				/				/	Basic	Embryology 1	**EWB3210**	-2024 /2025 **second**

			/				/				/	Basic	Educational Planning	**EWB3209**	-2024 /2025 **second**
			/				/				/	Basic	Biostatistics 1	**EWb2201**	-2024 /2025 **second**
			/				/				/	Basic	Biochemistry 1	**EWB3208**	-2024 /2025 **second**
			/				/				/	Basic	Developmental Psychology	**EWB3207**	-2024 /2025 **second**
			/				/				/	Basic	Crimes of the Baath Party in Iraq	**EWb2202**	-2024 /2025 **second**
			/				/				/	Basic	Arabic Language		-2024 /2025 **second**
			/				/				/	Basic	Computer Science	**Ewb 1202**	-2024 /2025 **second**
			/				/				/	Basic	Invertebrates 2	**EWb3201**	**-2024 /2025** second
			/				/				/	Basic	Histology 2	**EWb3205**	**-2024 /2025** second
			/				/				/	Basic	Plant Taxonomy 2	**EWB3210**	-2024 /2025 **second**
			/				/				/	Basic	Embryology 2	**EWB3209**	-2024 /2025 **second**
			/				/				/	Basic	Professional Ethics in Education		-2024 /2025 **second**

			/				/				/	Basic	Biostatistics 2	**EWB3208**	-2024 /2025 **second**
			/				/				/	Basic	Biochemistry 2	**EWB3207**	-2024 /2025 **second**
			/				/				/	Basic	Educational Leadership and Management	**EWb2203**	-2024 /2025 **second**
			/				/				/	Basic	English Language	**EWb3204**	-2024 /2025 **second**
			/				/				/	Basic	Educational Technology		-2024 /2025 **second**
			/				/				/	Basic	Microbiology 1	**EWB3305**	**-2024 /2025** Third
			/				/				/	Basic	Chordates and Comparative Anatomy 1	**EWB3301**	**-2024 /2025** Third
			/				/				/	Basic	Genetics 1	**EWB3303**	**-2024 /2025** Third
			/				/				/	Basic	General Entomology 1	**EWB3302**	**-2024 /2025** Third
			/				/				/	Basic	Algae	**EWB32O6**	**-2024 /2025** Third
			/				/				/	Basic	Environment and Pollution 1	**EWB3408**	**-2024 /2025** Third

			/				/				/	Basic	Teaching Methods for Students with Special Needs		**-2024 /2025** Third
			/				/				/	Basic	Microbiology 2	**EWB3305**	**-2024 /2025** Third
			/				/				/	Basic	Chordates and Comparative Anatomy 2	**EWB3301**	**-2024 /2025** Third
			/				/				/	Basic	Genetics 2	**EWB3303**	**-2024 /2025** Third
			/				/				/	Basic	General Entomology 2	**EWB3302**	**-2024 /2025** Third
			/				/				/	Basic	Archaeobacteria	**EWB32O6**	**-2024 /2025** Third
			/				/				/	Basic	Environment and Pollution 2	**EWB3408**	**-2024 /2025** Third
			/				/				/	Basic	Thinking Skills and Scientific Research Foundations		**-2024 /2025** Third
			/				/				/	Basic	Teaching Methods 1	**EWB2302**	**-2024 /2025** Third
			/				/				/	Basic	Animal Physiology	**WEB3312**	-2024 /2025 **Fourth**

			/				/				/	Basic	Plant Physiology	**EWB3405**	-2024 /2025 **Fourth**
			/				/				/	Basic	Parasitology	**EWB3401**	**Total Credit Units**
			/				/				/	Basic	Mycology	**EWB3309**	Fourth Year
			/				/				/	Basic	Immunology	**EWB3409**	**-2024 /2025** Fourth
			/				/				/	Basic	Sustainable Environment		**-2024 /2025** Fourth
			/				/				/	**optiona l**	Curriculum and School Textbooks		**-2024 /2025** Fourth
			/				/				/	Basic	Research Project		-2024 /2025 **Fourth**
			/				/				/	Basic	Practical Teaching 1		-2024 /2025 **Fourth**
			/				/				/	Basic	Research Project 2		-2024 /2025 **Fourth**
			/				/				/	Basic	Practical Teaching 2		-2024 /2025 **Fourth**
			/				/				/	Basic	Teaching Methods 2	**EWB2302**	-2024 /2025 **Fourth**
			/				/				/	Basic	Action Research		-2024 /2025 **Fourth**

- Please tick the boxes corresponding to the individual learning outcomes of the program being evaluated.

Course Description

1. Course Name:
Analytical chemistry
2. Course Code:
EWb3105
3. Semester / Year:
First course ٢٠٢٥/٢٠٢٤
4. Description Preparation Date:
2024/12/1
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
3/ 4
7. Course administrator's name (mention all, if more than one name)
Name: Atheer obaid talak Email: atheer_obaid@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• **Knowing the types of analys and the methods used for ea type and calculating the proportions of the analyzed materials** • **Knowledge of chemical equilibrium and its relationsl to chemical analysis** • **Knowing the types of precipitates and precipitates chemical analysis**

9. Teaching and Learning Strategies	
Strategy	The lecture is explained and clarified by presenting it to the students on the screen and re-clarifying it practicall after which the student is tested through daily exams.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	4	Definition of analyt chemistry, its types and the tools used i the analysis proces	Analytical chemistry	A theoretical and practical lecture	Daily exams and daily assignments
Second	٤	Types of precipitate and precipitants, th quantity of obtainir them, and preparin these precipitants	=	=	=
Third	٤	Molarity, standard, normality, and methods for prepar liquid and solid compounds from it	=	=	=
Fourth	٤	How to calculate percentages in sediments	=	=	=
Fifth	٤	Characteristics of sediments and precipitates	=	=	=
Sixth	٤	Chemical equilibriu	=	=	=
Seventh	٤	Acids and bases	=	Practical and theoretical exam	=
Eighth	٢	First month exam	=		
Ninth	٤	Ionization of strong acids and strong ba	=	=	=
Tenth	٤	Ionization of weak bases and weak aci	=		
Eleventh	٤	Ionization of strong salts and weak salts	=	=	=
Twelveth	٤	Ionization of water	=	=	=
Thirteenth	٤	Structured solution	=	=	=
		Ionization of a buffe solution of a weak base	=	=	=

Fourteenth Fifteenth	٤ ٢	Second month exam	=	= Practica and theoretical exam	= =

11. Course Evaluation

The grade is distributed out of 100 according to the theoretical exams: 20 marks, the practical exams: 10 marks, the daily exams: 5 marks, and the daily assignments: 5 marks. The final exam is 60 marks, divided into 15 practical marks and 40 theoretical marks.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (source)	General analytical chemistry bo
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
organic chemistry
2. Course Code:
EWb3107
3. Semester / Year:
Second course ٢٠٢٥/٢٠٢٤
4. Description Preparation Date:
2024/12/1
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
3/ 4
7. Course administrator's name (mention all, if more than one name)
Name: Atheer obaid talak Email: atheer_obaid@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• **Knowing the types of organ compounds resulting from natural sources** • **Knowing the organic nomenclature of hydrocarbo compounds and their types** • **Know the difference betwee alkanes, alkenes, and alkyn**
9. Teaching and Learning Strategies	
Strategy	The lecture is explained and clarified by presenting it to the students on the screen and re-clarifying it practicall after which the student is tested through daily exams

10. Course Structure

Week	Hours	Required Learning	Unit or subject name	Learning method	Evaluation method

		Outcomes			
First	4	Definition of organ chemistry	organic chemistry	A theoretical and practical lecture	Daily exams and daily assignments
Second	٤	Old nomenclature fo hydrocarbon chains	=	=	=
Third	٤	Alkanes	=	=	=
Fourth	٤	Naming alka according to mod nomenclature	=	=	=
Fifth	٤				=
Sixth	٤	Hydrogenation halogenation reacti of alkanes	=	=	
Seventh	٤	Physical and chemical properties of alkanes	=	=	=
Eighth	٢	Sources and methods of preparing alkanes	=	=	=
Ninth	٤				
		First month exam	=	Practical and theoretical exam	=
Tenth	٤	Ring nomenclature	=		
Eleventh	٤	Naming alkenes		=	=
Twelveth	٤	Mechanics of alcohol withdrawal	=	=	=
Thirteenth	٤	Reduction reactions of alkenes	=	=	=
Fourteenth	٤		=	=	=
Fifteenth	٢	Alkenes preparation reactions	=	=	=
		Naming alkynes	=	Practica and theoretical exam	=
		Second month exam	=		

11. Course Evaluation

The grade is distributed out of 100 according to the theoretical exams: 20 marks, the practical exams: 10 marks, the daily exams: 5 marks, and the daily assignments: 5 marks.

The final exam is 60 marks, divided into 15 practical marks and 40 theoretical marks.	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (source)	General basics of organic chemistry book
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Biology 2
2. Course Code:
EWb3104
3. Semester / Year:
Season/ First
4. Description Preparation Date:
1-12-2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Lecturer Dr. Ali Hussein Ibraheem Al-Bayati Email: ag.alihussein@uoanbar.edu.iq Name: Lecturer Asmaa Abdulameer Bedan Email: asmaa.abdulameer@uoanbar.edu.iq
8. Course Objectives

Course Objectives	This course aims to enable the biologist sciences student to master the general basics of botany, and includes a historical introduction. The branches of science, its scope, and its importance. It also mainly deals with the study of the apparent appearance and internal structure of the plant, the most important biological processes that occur in the plant, and the plant's relationship with humans and the environment.

9. Teaching and Learning Strategies	
Strategy	Through theoretical lectures and the laboratory aspect of training in the field of botany and determining the characteristics of its parts morphologically and anatomically using clarification methods and daily examinations, as well as discussing quarterly reports.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	**2Theoreti 2practical**	Knowledge	Introduction, and getting acquainted with the basic terms in the field of botany.	Use the whiteboar and display screen	Daily exam and oral questions
2	**2Theoreti 2practical**	Knowledge	Learn about the history of the development of botany and the contribution of Arab and Muslim scientists in the	Use the whiteboar and display screen	Daily exam and oral questions

			progress of science, its fields and branches and its importance.		
3	**2Theoreti 2practical**	Knowledge	Plant tissue Meristem tic plant tissue. Permanent plant tissues. Basic plant tissues. Plant connective tissue. Vascular plant tissue. Secretory plant tissue	Use the whiteboar and display screen	Daily exam and oral questions
4	**2Theoreti 2practical**	Knowledge	Learn about the composition of the plant cell and interpretation of basic biological processes in plants and linking basic concepts in botany and plant chemistry	Use the whiteboar and display screen	Daily exam and oral questions
5	**2Theoreti 2practical**	Knowledge	Root phenotypic structure. Types of roots - and the anatomical structure of the roots - natural secondary growth and types of modifications in the apparent and anatomical structure of the roots to adapt to the environment.	Use the whiteboar and display screen	Daily exam and oral questions
6	**2Theoreti 2practical**		First month exam		
7	**2Theoreti 2practical**	Knowledge	Phenotypic structure of the leg. Types of stems - and the anatomical structure of the stem - natural secondary growth and types of modifications in the apparent and anatomical structure of the stems to adapt to the environment	Use the whiteboar and display screen	Daily exam and oral questions
8	**2Theoreti 2practical**	Knowledge	Phenotypic structure of leaves. Types of leaves according to function - and the	Use the whiteboar and display screen	Daily exam and oral questions

			anatomical structure of the leaf -and types of modifications in the apparent and anatomical structure of leaves to adapt to the environment		
9	**2Theoreti 2practical**	Knowledge	Flower structure - types of inflorescences - and different types of fruits	Use the whiteboar and display screen	Daily exam and oral questions
10	**2Theoreti 2practical**	Knowledge	Root anatomy	Use the whiteboar and display screen	Daily exam and oral questions
11	**2Theoreti 2practical**	Knowledge	Stem anatomy	Use the whiteboar and display screen	Daily exam and oral questions
12	**2Theoreti 2practical**		Second month exam		
13	**2Theoreti 2practical**	Knowledge	Anatomy of leaves	Use the whiteboar and display screen	Daily exam and oral questions
14	**2Theoreti 2practical**	Knowledge	The basic biological processes in plants (photosynthesis and respiration) and their relationship to the environment	Use the whiteboar and display screen	Daily exam and oral questions
15	**2Theoreti 2practical**	Knowledge	The relationship between plants, humans, medicinal and economic plants	Use the whiteboar and display screen	Daily exam and oral questions

11.Course Evaluation

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks
Quest with final = 100 marks

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Basic of plant science
Main references (source)	Basics of Botany - Ruqaya Hussein Jassim - 201 Dar That Al Salasil for Printing and Publishing
Recommended books and references (scientific journals, reports…)	Principles of Plant Science: Environmental factors and technology in growing plants. by Dennis R. Decoteau (Author)2005.
Electronic references, websites.	https://www.agro-lib.site/2019/01/blog-post_66.html https://academic.oup.com/journals/

Course description

1. Course Name
Cytology2
2. Course Code
EWb3102
3. : Year / Semester
quarterly
4. : Date this description was prepared
1-12-2024
5. : Available attendance forms
weekly
6. (total) number of units \(total) Number of study hours
hours) per week ٤)practical hours = ٢theoretical hours + 2 (٢)Number of units
7. (if more than one name is mentioned) Name of the course administrator
M.M. Kawthar Muhammad Nasser & Latif A.M.D. Nidal Ibrahim : Name : Email Kawther naser@uoanbar.edu.iq:
8. Course objectives

• And develop emergence on Students identification The cell and its importance • components, whether Cell To study In addition animal, plant, or microscopic cells • cells for every Featured adjectives on And get to know the Some models to And touch Classification with in detail mission • Studying With importance Students identification for the formation of the cells as they are the basis body of living organisms and the tissues and organs they consist of, and thus the formation of the body's systems and knowing the functions of each cell and the .factors that affect them •	Objectives of the study subject

9. Teaching and learning strategies	
-١ -٢ ، Explanation and clarification -٣ ، Lecture method Student groups -٤ Practical lessons in the laboratory and scientific Brainstorming -٥ ، trips	**strategy The**

10. **Course structure**

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Theoretical tests And practical tests reports And	Explanation and presentation slide of the and model lecture	**Cytology2**	Some of the most important polysaccharides	٤	١
Theoretical tests And practical tests And reports	Explanation and presentation slide of the and model lecture	**Cytology2**	Cell division	٤	٢
Theoretical tests And practical tests reports And		**Cytology2**	First month exam	٤	٣
Theoretical tests And practical tests reports And	Explanation and presentation slide of the and model lecture	**Cytology2**	Ribosomes	٤	٤
Theoretical	Explanation and display	**Cytology2**	Stages of meiosis	٤	٥

tests And practical tests reports And	of the model and Slides lecture				
Theoretical tests And practical tests		**Cytology2**	Second month exam	٤	٦
					٧
					٨
					٩
					١٠
					11
					12
					13
					14
					15

11. Course evaluation

according to the tasks assigned to the student, such as 100 Distribution of the grade out of .etc , daily preparation, daily, oral, monthly, written exams, reports

marks ٢٥Monthly exams
marks ٥Daily preparation, daily exams and reports
marks ١٠Practical exam:
degrees ٤٠Strive
marks for practical exam) = ١٥marks for theoretical exam + ٤٥) Final exam
marks ٦٠

12. Learning and teaching resources

Abdul Hussein Faisal - Cell science **Gabriel Aziz - Cell Science** **My cell is practical book**	**Methodology, if) Required prescribed books (any**
Abdul Hussein Faisal - Cell science **Gabriel Aziz - Cell Science**	**(sources) Main references**

My cell is practical book The cell: microstructure and functions / Abdul-Hussein Al-Faisal, 2000	
‹Histology, Zoology Cell Biology / Abbas Hussein Mugheer Al- Rubaie , 2013	**and books Recommended supporting (... scientific journals, reports) references**
electronic references and Use of websites	**Electronic references, websites**

Course Description

1. Course Name: plant anatomy 1/ First course / First stage

2. Course Code:

3. Semester / Year: Semester /2024-2025

4. Description Preparation Date: 1/12/2024

5. Available Attendance Forms: Presence

6. Number of Credit Hours (Total) / 2 Hours practical + 2 Hours theoretical

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

Name: Dr. Haifa Hameed Rasheed / Email: haifaa.hameed@uoanbar.edu.iq

Name: Dr. Marwa Ismail Habib /Email: Marwahab22@uoanbar.edu.iq

8. Course Objectives

Course Objectives	Introduce the student in detail about the meaning of plant anatomy. Introduce the student to the different parts of the plant anatomically.

9. Teaching and Learning Strategies

Strategy	Through theoretical lectures and the laboratory aspect of training in the field of botany and determining the characteristics of its parts morphologically and anatomically using clarification methods and daily examinations, as well as discussing quarterly reports.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
١	٤	Student knowledge of the principles of plant anatomy	Define plant anatomy	Explanation - model presentation slides - and lecture	Theoretical T Practical te Reports
٢	٤	Learn about the parts of the plant and the branches of anatomy	A comprehensive introduction to plant anatomy and its branches	Explanation - model presentation slides - and lecture	Theoretical T Practical te Reports
٣	٤	Student knowledge of the description of the plant cell and its most	Study of the living components of a plant cell	Explanation - model presentation slides - and lecture	Theoretical T Practical te Reports

		important living components			
٤	٤	Student knowledge of the description of the plant cell and its most important living components	Study of the non-living components of plant parts	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
٥	٤	Identify the types of walls in plant cells and know the components of the wall.	plant cell wall	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
٦	٤	Knowledge of pits types	Study of types of pits	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
7	Monthly Examination				
٨	٤	A cognitive description of the most important theories that explain the cell wall	A study of the most important theories that explain the formation of the cell wall	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
٩	٤	Teaching the student how the plant classification process is carried out and what are the approved principles	Study of the bases adopted in the classification of plant tissues	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٠	4	Student knowledge of plant tissues, including collenchyma tissues	Study of the collenchyma tissue	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١١	٤	Student knowledge of plant tissues, including parenchyma tissues	Study of the parenchymal tissue	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٢	٤	Student knowledge of plant tissues, including sclerenchyma tissues	Study of the sclerenchyma tissue	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٣	٤	Student knowledge of the function of xylem and phloem tissue and knowledge of the anatomical structure of these tissues	The study of xylem and phloem texture	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٤	٤	Student knowledge of the function of xylem and phloem tissue and knowledge of the	The study of xylem and phloem texture	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports

		anatomical structure of these tissues				
١٥	Monthly Examination					

11. Course Evaluation

The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Fundamentals of plant anatomy Dr. Badri Owaid Al-Ani - University of Baghdad
Main references (source)	Fundamentals of plant physiology Doctor Ahmed Mostafa Elhayani.
Recommended books and references (scientificjournals, reports…)	Practical part in plant anatomy Practical plant anatomy
Electronic references, websites.	Use of electronic references, websites

Course Description

1. Course Name: plant anatomy ٢ / second course / First stage

2. Course Code:

3. Semester / Year: Semester /2024-2025

4. Description Preparation Date: 1/12/2024

5. Available Attendance Forms: Presence

6. Number of Credit Hours (Total) / 2 Hours theoretical

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

Name: Dr. Haifa Hameed Rasheed / Email: haifaa.hameed@uoanbar.edu.iq

Name: Dr. Marwa Ismail Habib /Email:Marwahab22@uoanbar.edu.iq

8. Course Objectives

Course Objectives	This course aims to study the internal structure of the plant by studying the anatomical sections of its various parts, studying the anatomical structure of the plant cell, the different types of tissues, and the anatomical structure of plant organs, in addition to knowing the effect of the environment on the anatomical structure of the plant.

9. Teaching and Learning Strategies

Strategy	1. Thinking and discussion methods. 2. Practical tests used in laboratories. 3. Teaching through exploratory lectures. 4. Acquire teamwork skills. 5. Benefit from computer, internet, and periodical skills.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
١	2	Teaching the student the anatomical structure of the plant and its function	Internal structure of the plant Internal structure of the root	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
٢	2	Introducing the student to the anatomy of the root zone and knowing the parts of the root	Internal structure of the root	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
٣	2	Introducing the student to the anatomy of the root zone and knowing the parts of the root	Internal structure of the root	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports

٤	2	Introducing the student to the anatomy of the leg area and knowing the anatomical parts of the stem	Internal structure of the stem	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
٥	2	Introducing the student to the anatomy of the stem region and the difference between the stem of monocotyledonous and dicotyledonous plants.	Internal structure of the stem	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
٦	2	Teaching the student the anatomy of the leaf and knowing the layers of the leaf and its internal parts	Internal structure of the leaf	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
7	Monthly Examination				
٨	2	Student knowledge of the diagonal expansion of monocotyledonous and dicotyledonous plants	Secondary thickening Vascular cambium	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
٩	2	Study of the principles adopted in classifying plant tissues	secondary xylum	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٠	2	Study of the principles adopted in classifying plant tissues	Secondary phloem	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١١	2	Study of the principles adopted in classifying plant tissues	surrounding epiderm	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٢	2	Teaching the student how diagonal expansion occurs in stems and roots.	Secondary thickening of stems and roots	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٣	2	Teaching the student about the relationship between the plant and the environment in causing anatomical changes	Secondary structure of plants and its relationship to the environment	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٤	2	Student knowledge of the importance of aquatic plants and their lifestyle	Aquatic plants	Explanation - model presentation slides - and lecture	Theoretical Tests Practical tests Reports
١٥	Monthly Examination				

11. Course Evaluation

The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Fundamentals of plant anatomy Dr. Badri Owaid Al-Ani - University of Baghdad

Main references (source)	Fundamentals of plant physiology Doctor Ahmed Mostafa Elhayani.
Recommended books and references (scientificjournals, reports…)	Practical part in plant anatomy Practical plant anatomy
Electronic references, websites.	Use of electronic references, websites

Course Description

1. Course Name:Human freedoms and rights

2. Course Code: EWB3209

3. Semester / Year: Semester

4. Description Preparation Date:13/4/2024

5. Available Attendance Forms:

6. Number of Credit Hours (Total) / Number of Units (Total) 60hoers

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

Name: sumaya foaad majeed
Email: sumaya.majeed@uoanbar.edu.iq

8. Course Objectives

Course Objectives	**• Coverage of human rights material.** **• Identify the classification of freedoms and rights.** **• The emergence and development of freedom**

9. Teaching and Learning Strategies

Strategy	

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	**Introduchng rights**			
2	2	**The Islamic concept of hur rights**			
3	2	**Basic freedoms**			
4	2	**The relationship of hur rights to public freedoms**			

5	2	**Classification of pu freedoms**			
6	2	**Human rights classification**			
7	2	**First month exam**			
8	2	**The emergence development of rights freedoms**			
9	2	**Human rights and freedom heavenly religions**			
10	2	**Principles of human rights Islamic law**			
11	2	**Rights and freedoms contemporary doctrines**			
12	2	**International systems protecting human rights freedoms**			
13	2	**International legitimacy in field of human rights**			
14	2	**Human rights and freedom Morocco**			
15	2	**Second month exam**			

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,...etc.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (source)	Books on rights and freedoms
Recommended books and references (scientific journals, reports…)	Scientific journals
Electronic references, websites.	Internet

Course Description

2. Course name	1.
Classroom learning psychology	
4. Course code	3.
6. semester/year	5.
Second semester of the academic year)2024/2025)	
8. Date of preparation of this description	7.
2/16/2025	
10. Available forms of attendance	9.
My presence	
12. Number of study hours (total)/Number of units (total)	11.
15 hours or more / Number of units: 3	
14. Course Supervisor Name (if more than one name is mentioned)	13.
the name:Prof. Dr. Walid Ahmed Abdel **Mail electronic**:waleed.abid@uoanbar.edu.iq	
16. Course objectives	15.
• Providing the student with knowledge of the rules andFramesGeneral psychological characteristics within the classroom • Review of modern learning theories that develops the student's personality • Familiarity with advanced methods that have an effective impact on the teaching and learning processes • Modifying learners' behavior and developing their scientific and performance skills inside the classroom	Course objectives

• Contribute to developmentObjectivesEmotional and enable students to useMethodsmodern thinking		
18. Teaching and learning strategies		17.
Using active and student-centered learning strategies to enable students to develop their potential effectively. Familiarity with teaching objectives and their various cognitive, emotional and skill levels Employing modern assessment and testing methods according to data	Strategy	
20. Course structure		19.

Evaluation method	Learning method	Name of unit or topic	Required learning outcomes	watches practical	watches theoretical	week
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	the first
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	the second
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	the third
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	Fourth
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	Fifth
					a test	Sixth
Oral and performance	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	Seventh

tests						
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	The eighth
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	Ninth
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	tenth
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	eleven th
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	twelfth
					a test	thirtee nth
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	fourte enth
Oral and performance tests	Theoretical and practical		As stated in paragraph nine	**2 hours**	One hour	fifteen th
22. One hour						21. the first
The grade is distributed out of 100 based on the tasks assigned to the student, such as daily preparation, daily, oral, monthly and written exams, reports, etc. 20 degrees						

	Reports	Final exams	Oral exams	monthly exams	Daily exams	Daily preparation
		60		30		10

24. Learning and teaching resources	23.

Classroom learning psychology	Required textbooks (Methodology if any)	
Learning and Classroom Teaching Nader Fahmy	Main References (Sources)	
Journal of Active Learning, Journal of Education and Psychology	Books and referencesARecommended journals (scientific journals, reports...)	
Reputable websites	Electronic references, websites	

Course Description

1- Course Name:Education administration
2- Course Code: :Education administration
3- Semester / Year:2024-2025
4- Date this description was prepared: 16/2/2024
5- Available attendance forms:my presence
6- Number of study hours (total)\number of units (total):14 o'clock
7- Name of the official judge (if more than one name is prohibited) // Hamas emad
8- Course objectives:

Objectives of the study subject:	• * tughatiy hadhih almadat almanahij aldirasiat watatawuraha * alnaerif ealaa ahim ma yumayiz bayn almanhaj alqadim walhadith * alalmam bibaed tarayiq altadris almutabaeat min qibal altadrisii
9. Teaching and learning strategies	
The strategy	af almaerifiat :- an tariffs altaalibat eilm alarshad binaweih wan tuadih altaalibat ahimiat alarshad __ tubdi altaalibat rayha hawl alaikhtibarat alahdaf almaharatiat :- an tumaris altaalibat siaghat aliahdaf _ an tunaqish altaalibat mumayizat aliakhtibarat alahdaf alwijdaniat :- tatwir qudrat altaalib ealaa aleamal _ altafkir almantiqiu _ an yatahamas altaalib alaa akhudh dawr aldurus

10- Course structure

Week	Hours	Required	Name of the unit or	Learning	Evaluation

		learning outcomes	topic	method	method
The First	2	In the ninth paragraph	Education administration	Theoretical	Theoretical question and discussion
The Secon	2	In the ninth paragraph	concept Education administration	Theoretical	Theoretical question and discussion
The Third	2		leadership	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	theoretically leadership	Theoretical	Theoretical question and discussion
The fifth	2		patterns Education administration	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	classroom managemen	Theoretical	Theoretical question and discussion
The sevent	2		the importance effective managemen	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	The concept education supervision	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Techniques The concept educationsupervision	Theoretical	Theoretical question and discussion
	2		Characteristics school		Theoretical question and discussion
					Theoretical question and discussion
					Theoretical question and discussion
					Theoretical question and discussion
					Theoretical question and discussion

Course Description

1. Course Name:	
General Arabic	
2. Course Code:	
Ewb 1102	
3. Semester / Year:	
2024 / 2025	
4. Description Preparation Date:	
2024 /12 / 1	
5. Available Attendance Forms:	
Classroom	
6. Number of Credit Hours (Total) / Number of Units (Total)	
Number of Credit Hours : 2 Number of Units : 2	
7. Course administrator's name (mention all, if more than one name)	
Name: Assist lect. Inas Hameed Nida Email: inas.hameed@uoanbar.edu.iq	
8. Course Objectives	
Course Objectives	1.Students should know the origins of drawing Arabic letters in terms of their depiction of the spoken word. 2.Correct common spelling mistakes and the use of punctuation marks. 3.Apply simple grammar rules in academic writing. 4.Knowledge of eloquent speech that affects the souls of readers, whether poetry or prose . 5.Acquire a language culture that qualifies him for oral and written communication in learning environment.
9. Teaching and Learning Strategies	
Strategy	1.Direct explanation with real-life examples related to education contexts. 2.Short class activities based on phrase correction, sentence parsing and spelling . 3.Gradual training of sound writing in terms of form and meaning. 4.Brainstorming when reading and analyzing educational texts. 5.Active learning activities such as: completing sentences – correcting texts-rewriting a paragraph.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Week 1	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Speech section / noun, verb and letter	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 2	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Rules for writing a syllable	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 3	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills	Rules of the numerical participle	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports

		and written and oral expression to qualify him to communicate with the learning environment			
Week 4	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Texts of pre-Islamic poetry My poem Jamil Buthaina and Kaab bin Zuhair	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 5	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Debutants and news	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 6	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules	Signs of original and subordinate expressions in nouns and verbs	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports

		correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment			
Week 7	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Punctuation marks	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 8	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Text from the Holy Quran (Surat al-Hijrat)	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 9	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic	Imperfect verbs	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports

		errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment			
Week 10	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Texts from Arabic prose	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 11	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Solar and lunar letters	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 12	2	The ability to use the classical Arabic language properly in educational and	Texts of Abbasid poetry, poems by Al-mutanabi and	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports

		academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Bashar Ibn Bard		
Week 13	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Causative particles	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 14	2	The ability to use the classical Arabic language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment	Diptote	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 15	2	The ability to use the classical Arabic	Texts of modern poetry	The blackboard, the method of	Daily tests +assignments

		language properly in educational and academic contexts, by writing functional texts free of linguistic errors, employing spelling and punctuation rules correctly, while developing reading comprehension skills and written and oral expression to qualify him to communicate with the learning environment		class participation and the method of diction	+reports

11. Course Evaluation

Class participation and weekly exercises 10%
Written test 20%
Household jobs and clerical assignments 10%
Final Test 60%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	General Arabic language for non-specialized departments, Ahmed Nassif, Abdulkader Hassan
Main references (source)	• The number in the language, Ali ibn Isma'il Ibn Sayyida • Dictation dictionary, Dr. Massad Mohammad Ziad
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name: geology
2. Course Code: EWb3106
3. Semester / Year: Semester
4. Description Preparation Date:29/3/2024
5. Available Attendance Forms:
6. Number of Credit Hours (Total) / Number of Units (Total)
7. Course administrator's name (mention all, if more than one name)
Name: Asmaa Wajeeh jumaa Email: edw.ah2010n@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• ..... • ..... • .....

9. Teaching and Learning Strategies

Strategy	

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	**Introduction and Definition of geology**			
2	2	**Examples**			
3	2	**Ligneous rocks**			
4	2	**Characteristic of Igneous rocks**			
5	2	**Types of Igneous rocks**			
6	2	**Sedimentary rocks**			
7	2	**Types of Sedimentary rocks**			
8	2	**Example**			
9	2	**First month exam**			
10	2	**Metals**			
11	2	**Types and uses metals**			
12	2	**Examples of metals**			
13	2	**Metamorphic rocks**			
14	2	**Types Metamorphic rocks**			
15	2	**Second month exam**			

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,...etc.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Geology
Main references (source)	
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course description

1. Course Name
Cytology1
2. Course Code
EWb3101
3. : Year / Semester
quarterly
4. : Date this description was prepared
1-12-2024
5. : Available attendance forms
weekly
6. (total) number of units \(total) Number of study hours
hours) per week ٤)practical hours = ٢theoretical hours + 2 (٢)Number of units
7. (if more than one name is mentioned) Name of the course administrator
M.M. Kawthar Muhammad Nasser & **Latif A.M.D. Nidal Ibrahim** : Name : Email Kawther naser@uoanbar.edu.iq:
8. Course objectives

• And develop emergence on Students identification The cell and its importance • components, whether Cell To study In addition animal, plant, or microscopic cells • cells for every Featured adjectives on And get to know the Some models to And touch Classification with in detail mission • Studying With importance Students identification for the formation of the cells as they are the basis body of living organisms and the tissues and organs they consist of, and thus the formation of the body's systems and knowing the functions of each cell and the .factors that affect them	Objectives of the study subject

•	

9. Teaching and learning strategies

-١ -٢ ، Explanation and clarification -٣ ، Lecture method Student groups -٤ Practical lessons in the laboratory and scientific Brainstorming -٥ ، trips	**strategy The**

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Theoretical tests And practical tests reports And	Explanation and presentation slide of the and model lecture	**Cytology1**	History of the development of cell science	٤	١
Theoretical tests And practical tests And reports	Explanation and presentation slide of the and model lecture	**Cytology1**	Cytoplasm	٤	٢
Theoretical tests And practical tests reports And	Explanation and presentation slide of the and model lecture	**Cytology1**	Cellular communication	٤	٣
Theoretical tests And practical	Explanation and presentation slide of the	**Cytology1**	Types of cellular communication	٤	٤

tests reports And	and model lecture				
Theoretical tests And practical tests reports And		**Cytology1**	**First month exam**	٤	٥
Theoretical tests And practical tests	Explanation and display of the model and Slides lecture	**Cytology1**	Lysosomes	٤	٦
Theoretical tests And practical tests reports And	Explanation and presentation slide of the and model lecture	**Cytology1**	Cell organelles	٤	٧
Theoretical tests And practical tests reports And	Explanation and presentation slide of the and model lecture	**Cytology1**	Cytoplasm functions	٤	٨
Theoretical tests And practical tests reports And		**Cytology1**	Second month exam	4	٩
					١٠
					11
					12
					13
					14
					15

11. Course evaluation
according to the tasks assigned to the student, such as 100 Distribution of the grade out of .etc , daily preparation, daily, oral, monthly, written exams, reports **marks ٢٥Monthly exams** **marks ٥preparation, daily exams and reports Daily** **marks ١٠Practical exam:** **degrees ٤٠Strive** **marks for practical exam) = ١٥marks for theoretical exam + ٤٥)Final exam** **marks ٦٠**

12. Learning and teaching resources	
Abdul Hussein Faisal - Cell science **Gabriel Aziz - Cell Science** **My cell is practical book**	**Methodology, if) Required prescribed books (any**
Abdul Hussein Faisal - Cell science **Gabriel Aziz - Cell Science** **My cell is practical book** The cell: microstructure and functions / Abdul-Hussein Al-Faisal, 2000	**(sources) Main references**
،Histology, Zoology Cell Biology / Abbas Hussein Mugheer Al- Rubaie , 2013	**and books Recommended supporting (... scientific journals, reports) references**
electronic references and Use of websites	**Electronic references, websites**

Course Description

1. Course Name:
Headway Beginner
2. Course Code:
3. Semester / Year:
Semester
4. Description Preparation Date:
28/2/2024
5. Available Attendance Forms:
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours / 15 units
7. Course administrator's name (mention all, if more than one name)
Name: Prof.Dr. Ali Sabah Jameel Email: alisabah40@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• Training students in creative reading. • Mastering language skills, mastering writing, and developing a cognitive vocabulary store. • The ability to use multiple types of reading, understand written materials. • Ability to distinguish between concepts, and analyze text to divide information into parts. • Forming a coherent cognitive text that expresses information in a specific field.

9. Teaching and Learning Strategies

Strategy	Modern lecture, group work, and using technology tool.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	2	**To be able to welcome people**	**Hello.**		
2	2	**To be able to ask about people**	**Your World.**		
3	2	**To be able to introduce oneself.**	**All About You.**		
4	2	**To be able to introduce family and friends and ask**	**Family and Friend**		

		questions about friends.			
5	2	**To identify vocabulary about our life.**	**The Way Live**		
6	2	**To identify daily vocabulary.**	**Every Day.**		
7	2		**Mid-Term Exam**		
8	2	**To speak about Favourites**	**My Favourites.**		
9	2	**To ask personal information.**	**Where I live.**		
10	2	**To form past tense sentences.**	**Times Past.**		
11	2	**To speak about our daily time.**	**We had Great tim**		
12	2	**To express our abilities and the verbs related to them.**	**I can Do It!**		
13	2	**To use language functions.**	**Please and Thank**		
14	2	**To use daily expressions.**	**Here and Now**		
15	2	**To express about future plans.**	**It's Time to Go!**		

11. Course Evaluation

The evaluation process consisted of 2 mid-term exams allotted 40 marks, and summative exam allotted 60 marks.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Headway Beginner
Main references (source)	
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Biochemistry
2. Course Code:
EWB3207
3. Semester / Year:
Second course ٢٠٢٥/٢٠٢٤
4. Description Preparation Date:
2024/3/29
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
3/ 4
7. Course administrator's name (mention all, if more than one name)
Name: Atheer obaid talak Email: atheer_obaid@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• **Knowledge of fats and their chemical composition** • **Knowledge of amino acids a their role in the formation of important proteins in the organism of living organisms** • **Knowing the names and type of fatty compounds**
9. Teaching and Learning Strategies	
Strategy	The lecture is explained and clarified by presenting it to the students on the screen and re-clarifying it practicall after which the student is tested through daily exams.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	4	Definition and natu of fats	Biochemistry	A theoretical and practical lecture	Daily exams and daily assignments
Second	٤	Fatty acids	=	=	=
Third	٤	Naming fatty acids	=	=	=
Fourth	٤	Polar and non-po amino acids	=	=	=
Fifth	٤	The cyclic struct of sugars	=	=	=
Sixth	٤	Disaccharides polysaccharides	=	=	=
Seventh	٤	Peptides and prote	=	=	=
Eighth	٢	First month exam	=	Practical and theoretical exam	=
Ninth	٤	Quaternary structure of protein	=	=	=
Tenth	٤	amino acids	=	=	=
Eleventh	٤	Enzymes	=	=	=
Twelveth	٤	Vitamins	=	=	=
Thirteenth	٤	Nucleic acids	=	=	=
Fourteenth	٤	DNA synthesis	=	Practical and theoretical exa	=
Fifteenth	٢	Second month exam	=		=

11. Course Evaluation
The grade is distributed out of 100 according to the theoretical exams: 20 marks, the practical exams: 10 marks, the daily exams: 5 marks, and the daily assignments: 5 marks. The final exam is 60 marks, divided into 15 practical marks and 40 theoretical marks.

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	
Main references (source)	General biochemistry book
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Biochemistry١
2. Course Code:
EWB3207
3. Semester / Year:
Second course ٢٠٢٤/٢٠٢٥
4. Description Preparation Date:
2024/1/12
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
3/ 4
7. Course administrator's name (mention all, if more than one name)
Name: Atheer obaid talak Email: atheer_obaid@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• **Knowing what biochemistry** • **• Knowing the sources of carbohydrates** • **• Knowing the metabolic pathways in living organisms**
9. Teaching and Learning Strategies	
Strategy	The lecture is explained and clarified by presenting it to the students on the screen and re-clarifying it practicall after which the student is tested through daily exams.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	4	What is biochemistry and what is cellular metabolism.	Biochemistry	A theoretical and practical lecture	Daily exams and daily assignments
Second	٤	glycolysis reactions	=	=	=
Third	٤	Explanation glycolysis reactions	=	=	=
Fourth	٤	Fate of pyruv produced by glycolys	=	=	=
Fifth	٤	Krebscycle and reactions	=	=	=
Sixth	٤	Krebscycle organization	=	=	=
Seventh	٤	glyoxylate cycle	=	=	=
Eighth	٢	First month exam	=	=	=
Ninth	٤	The relationship between the Krebs cycle and glycolysis	=	Practical and theoretical exam	=
Tenth	٤	Phosphogluconate pathways	=	=	=
Eleventh	٤	Glycogen breakdown and its role in metabolism	=	=	=
Twelveth	٤	Glycogen synthesis and glucose synthesis	=	=	=
Thirteenth	٤	Photosynthesis	=	=	=
Fourteenth	٤	Amino acid and protein metabolism	=	=	=
Fifteenth	٢	Second month exam	=	= Practical an	=

				theoretical ex	

11. Course Evaluation

The grade is distributed out of 100 according to the theoretical exams: 20 marks, the practical exams: 10 marks, the daily exams: 5 marks, and the daily assignments: 5 marks. The final exam is 60 marks, divided into 15 practical marks and 40 theoretical marks.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (source)	Book Introduction to General Biochemistry
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name: biostatistics1

2. Course Code: EWB3208

3. Semester / Year: 2026

4. Description Preparation Date: 2025

5. Available Attendance Forms: presence

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

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

Name: Assistant Professor Doctor OMAR HAZYM ALRAWI
Email: ag.omar.hazym@uoanbar.edu.iq

8. Course Objectives

Course Objectives	Statistics investigates how to deal with data and classify it for the purpose of producing useful results from it - Study types of data. - Study methods for collecting and tabulating data. - Study methods of data analysis

9. Teaching and Learning Strategies

Strategy	

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
the first the second the third the fourth	4		Principles of probability theory Probability exercises Normal distribution of data	Electronic lectures and practical application in laboratories and	Questions, discussions and examples

Fifth VI Seventh VIII Ninth The tenth eleventh twelveth Thirteenth fourteenth Fifteenth			Applications to normal distribution of data Chi-square test for homogeneous samples Chi-square test for heterogeneous samples Simple correlation Simple regression F test Completely randomized design Completely randomized block design	fields	

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,...etc.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Introduction to statistics Dr. Khasha Mahmoud Al-Rawi Ministry of Higher Education and Scientific Research / University of Mosul
Main references (source)	Introduction to statistics Dr. Khasha Mahmoud Al-Rawi Ministry of Higher Education and Scientific Research / University of Mosul
Recommended books and references (scientific journals, reports…)	- Basics of Statistics 2016 Dr. Nazim Younis Abd. 2Principles of Statistics, Ahmed Abdel Samie, Medical, 2008. 3- Principles of statistics. Adnan Ghanem Al-Makhul 2006. 3- Recent articles from the Internet and from specialized scientific journals
Electronic references, websites.	- Microsoft Word 2- Microsoft Power point 3- Microsoft Excel 4- Classroom 5- You tube 6- Google meet

Course Description

1- Course Name: Educational leadership and management
2- Course Code: :
3- Semester / Year:2024-2025
4- Date this description was prepared: 16/2/2024
5- Available attendance forms:my presence
6- Number of study hours (total)\number of units (total):14 o'clock
7- Name of the official judge (if more than one name is prohibited) // Hamas emad
8- Course objectives:

Objectives of the study subject:	• * Description of management and leadership • Types of management • Explain educational planning
9. Teaching and learning strategies	
The strategy	Using active and student-centered learning strategies to enable students to develop their potential effectively.

10- Course structure

Week	Hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
The First	2 ocloc Ck	In the ninth paragraph	Education administration	Theoretical	Theoretical question and discussion
The Second	2	In the ninth	concept Education	Theoretical	Theoretical

		paragraph	administration		question and discussion
The Third	2		leadership	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	theoretically leadership	Theoretical	Theoretical question and discussion
The fifth	2		patterns Education administration	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	classroom managemen	Theoretical	Theoretical question and discussion
The seventh	2		the importance effective managemen	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	The concept education supervision	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Techniques The concept educationsupervision	Theoretical	Theoretical question and discussion
Educatio Planning	2	-	Characteristics school	-	Theoretical question and discussion
Types of Educatio Planning	2	-	-	-	Theoretical question and discussion
					Theoretical question and discussion
					Theoretical question and discussion
					Theoretical question and discussion

Course Description

1. Course Name:
Animal Histology 1
2. Course Code:
EWb4305
3. Semester / Year:
Semester (2024−2025)
4. Description Preparation Date: 1/12/2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Shymaa Hajlan Sayer & Nbaa Mutea Abid AL-Alh Email: Edw.Shmaah.s@uoanbar.edu.iq naba.mutia@uoanbar.edu.iq
8. Course Objectives • Knowing the types of animal tissues and the distinctive characteristics of each tissue • Identify the most important specializations of the cells of the human or animal body • Identify the most important functions of tissues and their locations
9. Teaching and Learning Strategies

Strategy	• Presenting the lecture through a meeting using the Whitboard or projector (data show)- dialogue - group discussion - investigation and exploration - problem

	solving - scientific research - practical application in the laboratory - brainstorming.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Typical explanation of slides and lecture	Histologica section of simple & stratified epithelial tissues	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
2	4	Typical explanation of slides and lecture	Histologica section of glands	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
3	4	Typical explanation of slides and lecture	Celle of connective tissues	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
4	4	Typical explanation of slides and lecture	Histologica section of Loose&der connective tissues	Knowledge and understanding Ability to analyze Developing teaching skill Practical application skill	Theoretical tests Practical tests Reports
5	4	Typical explanation of slides and lecture	Histologica section of different types of cartilage	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
6	4	Typical explanation of slides and lecture , preparing reports, and discussing	Histologica section of bone	Knowledge and understanding Ability to analyze Developing teaching skill Practical application skill	Theoretical tests Practical tests Reports

7	4	Typical explanation of slides and lecture	blood tissu	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
8	4		Hemobioti tissue		Theoretical tests Practical tests Reports
9	4	Typical explanation of slides and lecture	Second exame	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical te Practical tests Reports
10	4	Typical explanation of slides and lecture	Types of Muscular tissuee	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
11	4	Explanation, lecture, and presentation of the materia using the blackboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Types of nervous ce and nervou tissues	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
12	4	Typical explanation of slides and lecture	Type of neurogilia	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
13	4		Study Brain tissue		Theoretical tests Practical tests Reports
14	4	Typical explanation of slides and lecture	Cerebellun and nervou cord	Knowledge and understanding Ability to analyze Developing teaching skill Practical application skill	Theoretical tests Practical tests Reports

15	4	Typical explanation of slides and lecture	second month exa	Knowledge and understandin Ability to analyze Developing teaching skill Practical application skill	Theoretical tests Practical test Reports

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,...etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Educational histology - Abdul Hakim Ahmed Al-Rawi
Main references (source)	Lowe J,S,Anderson p and Anderson 2018 stevens and lowes Humon E-BOOK :Elservier H ealth Sciences
Recommended books and references (scientific journals, reports…)	Histology written by Dr. Ahmed Noman Nasr Practical animal tissue booklet
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
Animal Histology
2. Course Code:
EWb4305
3. Semester / Year:
Semester (2024–2025)
4. Description Preparation Date: 1/12/2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Shymaa Hajlan Sayer & Nbaa Mutea Abid AL-Alh Email: Edw.Shmaah.s@uoanbar.edu.iq naba.mutia@uoanbar.edu.iq
8. Course Objectives • Knowing the types of animal tissues and the distinctive characteristics of each tissue • Identify the most important specializations of the cells of the human or animal body • Identify the most important functions of tissues and their locations
9. Teaching and Learning Strategies

Strategy	• Presenting the lecture through a meeting using the Whitboard or projector (data show)- dialogue - group discussion - investigation and exploration - problem

	solving - scientific research - practical application in the laboratory - brainstorming.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Typical explanation of slides and lecture	Method o collaction the sampl tissue	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
2	4	Typical explanation of slides and lecture	Method o fixation th tissue and type of fixation	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
3	4	Typical explanation of slides and lecture	Serosae stapes to prepared t histologic slides	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
4	4	Typical explanation of slides and lecture	Stains and method of staining	Knowledge and understanding Ability to analyze Developing teaching skill Practical application skill	Theoretical tests Practical tests Reports
5	4	Typical explanation of slides and lecture	First exan	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
6	4	Typical explanation of slides and lecture , preparing reports, and discussing	Skin and appendag	Knowledge and understanding Ability to analyze Developing teaching skill Practical application skill	Theoretical tests Practical tests Reports

7	4	Typical explanation of slides and lecture	Circular system	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
8	4		Digestive system		Theoretical tests Practical tests Reports
9	4	Typical explanation of slides and lecture	Appendag od digesti system	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical te Practical tests Reports
10	4	Typical explanation of slides and lecture	Urinary system	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
11	4	Explanation, lecture, and presentation of the materia using the blackboard and projector. Conducting laboratory experiments, preparing reports, and discussing	The secon exame	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
12	4	Typical explanation of slides and lecture	Respirato system	Knowledge and understanding Ability to analyze Developing teaching skill Practical application Skill	Theoretical tests Practical tests Reports
13	4		indocrine		Theoretical tests Practical tests Reports
14	4	Typical explanation of slides and lecture	Male reproducti system	Knowledge and understanding Ability to analyze Developing teaching skill Practical application skill	Theoretical tests Practical tests Reports

15	4	Typical explanation of slides and lecture	second month exa	Knowledge and understanding Ability to analyze Developing teaching skill Practical application skill	Theoretical tests Practical tests Reports

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,...etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Educational histology - Abdul Hakim Ahmed Al-Rawi
Main references (source)	Lowe J,S,Anderson p and Anderson 2018 stevens and lowes Humon E-BOOK :Elservier H ealth Sciences
Recommended books and references (scientific journals, reports…)	Histology written by Dr. Ahmed Noman Nasr Practical animal tissue booklet
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
Headway Plus Pre-Intermediate
2. Course Code:
3. Semester / Year:
Semester
4. Description Preparation Date:
28/٣/2024
5. Available Attendance Forms:
Attendance in classrooms
6. Number of Credit Hours (Total) / Number of Units (Total)
30 hours / 15 units
7. Course administrator's name (mention all, if more than one name)
Name: Prof.Dr. Ali Sabah Jameel Email: alisabah40@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• Training students in creative reading, mastering language skills, mastering writing, and developing a cognitive vocabulary store. • The ability to use multiple types of reading. • understand written materials, distinguish between concepts, and analyze text to divide information into parts. • Forming a coherent cognitive text that expresses information in a specific field.

9. Teaching and Learning Strategies	
Strategy	Modern lecture, group work, and using technology tool.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or Subject Name	Learning Method	Evaluation Method
1	2	**As mentioned in item 8**	**Getting to Know You**		
2	2	**As mentioned in item 8**	**Whatever Makes You Happy.**		
3	2	**As mentioned in item 8**	**What's in the News.**		
4	2	**As mentioned in item 8**	**Review Units 1, 2, and 3.**		
5	2	**As mentioned in item 8**	**Eat, Drink. And be Merry!**		
6	2	**As mentioned in item 8**	**Looking Forward.**		

7	2	**As mentioned in item 8**	**The Way I see it.**		
8	2	**As mentioned in item 8**	**Mid-Term Exam**		
9	2	**As mentioned in item 8**	**Living History.**		
10	2	**As mentioned in item 8**	**Girls and Boys.**		
11	2	**As mentioned in item 8**	**Time for a Story.**		
12	2	**As mentioned in item 8**	**Our Interactive World.**		
13	2	**As mentioned in item 8**	**Life's What you make it!**		
14	2	**As mentioned in item 8**	**Just Wondering.**		
15	2	**As mentioned in item 8**	**Review Units 7 -12.**		

11. Course Evaluation

The evaluation process consisted of 2 mid-term exams allotted 40 marks, and summative exam allotted 60 marks.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Headway Plus Pre-Intermediate
Main references (source)	
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1- Course Name: Educational planning
2- Course Code: :
3- Semester / Year:2024-2025
4- Date this description was prepared: 22/2/2024
5- Available attendance forms:my presence
6- Number of study hours (total)\number of units (total): 15 weeks
7- Name of the official judge (if more than one name is prohibited) Walid Ahmed Abd
8- Course objectives:

Objectives of the study subject:	1- 1. Knowledge of Educational Planning 2- 2. Educational Planning in Addressing Educational Problems 3- 3. Quantitative Methods of Educational Planning
9. Teaching and learning strategies	
The strategy	Cognitive objectives: To familiarize the student with educational planning, its types, and methods. Skill objectives: To solve problems in light of educational planning. Affective objectives: To develop the student's ability to work in harmony with the emotional aspect of educational planning.
10- Course structure	

Week	Hours	Required learning	Name of the unit or topic	Learning method	Evaluation method

		outcomes			
The First	2	In the ninth paragraph	Educational planning concepts	Theoretical	Theoretical question and discussion
The Secon	2	In the ninth paragraph	Types of educational planning	Theoretical	Theoretical question and discussion
The Third	2		Quantitative methods of educational planning	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	Educational planning after quality	Theoretical	Theoretical question and discussion
The fifth	2		The role of educational planning in treating educational problems	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	Planning for Higher Education in Arab Countries	Theoretical	Theoretical question and discussion
The sevent	2		Educational planning in Arab countries	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	a test	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Statistics in educational planning	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	The relationship between statistics and educational planning	Theoretical	Theoretical question and discussion
The eleven	2	In the ninth paragraph	Educational administration in light of planning	Theoretical	Theoretical question and discussion
The twelve	2	In the ninth paragraph	The development of management in light of educational planning	Theoretical	Theoretical question and discussion
The thirteer	2	In the ninth paragraph	Test 2	Theoretical	Theoretical question and discussion
The fourtee	2	In the ninth paragraph	review	Theoretical	Theoretical question and discussion
The fifteen	2	In the ninth paragraph	review	Theoretical	Theoretical question and discussion

course Description

1. Course name
2plant classification
2. Course code
EWB3310
3. Year / Chapter
2026 -2025 **-/ Chapter Two**
4. Date of preparation of this description
30/3/2025
5. forms Available attendance
Laboratory + Classroom
6. (total) Number of units / (total) Number of study hours
3 : **Number of units** 2 **:Number of weekly hours**
7. (if more than one name is mentioned) Name of the course administrator
:Name.‹Dr. Dashwaq Talib Hamid ‹ M. Ebtehal .Asst Mohammed : **Email** ibtehal.mohammed @uoanbar.edu.iq Ashwaq.talib@uoanbar.edu.iq
8. Course objectives

• **Learn about plant taxonomy** • **Plant naming** • **How to prepare a plant group** • **Drying methods** • **Herbarium Jobs**	**Subject objectives**

9. Teaching and learning strategies	
1- **Daily and monthly tests**	**Strategy**

2- Writing reports on the subject 3- .Ask a question and discuss it with students 4- Assign students to search for the latest developments in the . subject on the Internet 5- Use of electronic visual aids	

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Plant taxonomy	To prepare the student to be a successful biology teacher or .researcher	2	1 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Plant naming	To prepare the student to be a successful biology teacher or .researcher	2	2 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	How to prepare a plant group	To prepare the student to be a successful biology teacher or .researcher	2	3 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Field sample collection stages	To prepare the student to be a successful biology teacher or .researcher	2	4 Week
Theoretical questions,	Lecture, electronic presentatio	Sample compression and drying stage	To prepare the student to be a successful biology teacher or	2	5 Week

discussions and oral tests	**n and discussion**		**.researcher**		
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	**methods Drying**	**To prepare the student to be a successful biology teacher or .researcher**	2	6 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	First monthly test	**To prepare the student to be a successful biology teacher or .researcher**	2	7 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	**Poisoning and preservation stage**	**To prepare the student to be a successful biology teacher or .researcher**	2	8 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	**Download and paste stage**	**To prepare the student to be a successful biology teacher or .researcher**	2	9 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	**Identification stage**	**To prepare the student to be a successful biology teacher or .researcher**	2	10 Week
Theoretical questions, discussions	**Lecture, electronic presentation and**	**Organization and composition of the herbarium**	**To prepare the student to be a successful biology teacher or .researcher**	2	11 Week

and oral tests	discussion				
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Herbarium Jobs	To prepare the student to be a successful biology teacher or .researcher	2	12 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Poaceae family	To prepare the student to be a successful biology teacher or .researcher	2	13 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	The Crusader Family	To prepare the student to be a successful biology teacher or .researcher	2	14 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Complex family	To prepare the student to be a successful biology teacher or .researcher	2	15 Week
11. Course Evaluation					
%60 ؛Final exam %10 : Practical exam %5 : Reports %5 : Daily exam %20 : Monthly exam					
12. Learning and teaching resources					

plants, Book of classification of seed –written by Youssef Mansour Al Internet sites –Kateb 2	(Methodology if any) Required Textbooks
	(Sources) Main References
	and books Recommended supporting (.etc ،scientific journals, reports) references
	Electronic references, websites

Course Description

1. **Course name**
Plant classification 1
2. **Course code**
EWB3306
3. **Year / Chapter**
2025-2026 **/ Chapter One**
4. **Date of preparation of this description**
1-3-2025
5. **Available attendance forms**
Laboratory + Classroom
6. **(total) Number of units / (total) Number of study hours**
3 : **Number of units 2+2 :Number of weekly hours**
7. **(if more than one name is mentioned) Name of the course administrator**
: **Email Asst. M. Ebtehal Mohammed Khalaf ،Dr. Dashwaq Talib Hamid :Name** ibtehal.mohammed @uoanbar.edu.iq Ashwaq.talib@uoanbar.edu.iq
8. **Course objectives**

• **Identifying root shapes** • **Types of stems and their mutations** • **Identifying leaf shapes and their mutations** • **Flower structure and symmetry, identifying types of fruits and inflorescences**	**Subject objectives**

9. **Teaching and learning strategies**	
1- **Daily and monthly tests** 2- **Writing reports on the subject** 3- **.Ask a question and discuss it with students** 4- **Assign students to search for the latest developments in the**	**Strategy**

. subject on the Internet 5- Use of electronic visual aids	

10. Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	Watches	The week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Introduction to morphology and root zones	To prepare the student to be a successful biology teacher or .researcher	2	1 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Basic root types	To prepare the student to be a successful biology teacher or .researcher	2	2 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Leg and its types	the To prepare student to be a successful biology teacher or .researcher	2	3 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Modified stems	To prepare the student to be a successful biology teacher or .researcher	2	4 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Parts of the leaf Typical	To prepare the student to be a successful biology teacher or .researcher	2	5 Week

Theoretical ‘questions discussions and oral tests	**Lecture, electronic presentation and discussion**	**Leaf blade shapes**	**To prepare the student to be a successful biology teacher or .researcher**	2	6 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	First monthly test	**To prepare the student to be a successful biology teacher or .researcher**	2	7 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	**veining , simple and compound leaf**	**To prepare the student to be a successful biology teacher or .researcher**	2	8 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	**Leaf to stem connection , hairy covering of leaves**	**To prepare the student to be a successful biology teacher or .researcher**	2	9 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	**Flowers**	**To prepare the student to be a successful biology teacher or .researcher**	2	10 Week
Theoretical questions, discussions and oral tests	**Lecture, electronic presentation and discussion**	**Types of flowers and their shapes**	**To prepare the student to be a successful biology teacher or .researcher**	2	11 Week
Theoretical	**Lecture, electronic**	**Flower symmetry**	**To prepare the student to be a**	2	12 Week

questions, discussions oral and tests	presentation and discussion		successful biology teacher or .researcher		
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	The fruits	To prepare the student to be a successful biology teacher or .researcher	2	13 Week
Theoretical questions, discussions and oral tests	Lecture, electronic presentation and discussion	Seeds	To prepare the student to be a successful biology teacher or .researcher	2	14 Week
Theoretical questions, discussions and oral tests	،Lecture electronic presentation and discussion	Second month test	To prepare the student to be a successful biology teacher or .researcher	2	15 Week

11. Course Evaluation
%60 ؛Final exam %10 : Practical exam %5 : Reports %5 : Daily exam %20 : Monthly exam

12. resources Learning and teaching	
Taxonomy of seed plants by Youssef Internet sites –Kateb 2 –Mansour Al	(Methodology if any) Required Textbooks
	(Sources) Main References

	and books Recommended supporting (.etc ،scientific journals, reports) references
	references, websites Electronic

Course Description

١. Course Name:
Crimes of the defunct Baath Party
٢. Course Code:
٣. Semester / Year:
Semester
٤. Description Preparation Date:
١٧-١٠-٢٠٢٤
٥. Available Attendance Forms:
weekly
٦. Number of Credit Hours (Total) / Number of Units (Total)
٢ theoretical hours = (٢ hours) per week Number of units (٢)
٧. Course administrator's name (mention all, if more than one name)
Name Emad Hassan Salih & Marih Qahtan Qaddory Email: edw.amad١٩٧٨gaese@uoanbar.edu.iq maria qahtan@uoanbar.edu.iq
٨. Course Objectives

Course Objectives	• Introducing students to the crimes of the Baath Party • In addition to knowing the violations committed by the former regime agains civil and political rights • Explaining the effects resulting from the wars on Iraqi soil during the period the former regime's rule
٩. Teaching and Learning Strategies	
Strategy	١- Explanation and clarification, ٢- Lecture method, ٣- Student groups, ٤- Practical lessons in the laboratory and scientific trips, ٥- Brainstorming

١٠. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
١	٢	Violations of rights and freedoms	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
	٢	Intellectual rigl violations	Crimes of the defunct Baath Party	theoretical	Theoretical questions and

					discussions + or exams
٣	٢	Violation of the right party pluralism	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
٤	٢	Violation of freedom opinion	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
٥	٢	Violation of internatio law / the first and seco Gulf wars	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
٦	٢	The impact of the Baath regime's behavior or society and its dominar over the state	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
٧	٢	Limiting the three powe to the Baathist regime	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
٨	٢	Tyranny corrupts mora and fights scholars	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
٩	٢	first month Exam	Crimes of the defunct Baath Party		
١٠	٢	The psychologi and social mechanism used by the previous regime	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
١١	٢	Culture, media, and th militarization of socie	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
١٢	٢	scorched earth policy	Crimes of the defunct Baath Party	theoretic	Theoretical questions and discussions + or exams
١٣	٢	Mass graves and bomb of places of worship	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or exams
١٤	٢	The effects of the wars Iraq	Crimes of the defunct Baath Party	theoretical	Theoretical questions and discussions + or

					exams
١٥	٢	second month Exam	Crimes of the defunct Baath Party		

١١. Course Evaluation

Do daily tests
Conduct monthly tests
Active daily participation during the lecture and opening the door to dialogue

١٢. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Platform for the crimes of the defunct Baath Party
Main references (source)	Encyclopedia of the Iraqi Environment/Salim Matar The effect of the use of radiological weapons on the air and soil / Master's thesis
Recommended books and references (scientific journals, reports…)	Crimes of forced population displacement Adam Suleiman
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name: compeuter

2. Course Code: EWB2103

3. Semester / Year: second semester 2024–2025

4. Description Preparation Date:1/10/2024

5. Available Attendance Forms: Attendance in classrooms and laboratories

6. Number of Credit Hours (Total) :2 / Number of Units (Total): 2

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

Name: Nazhon Ismail Khaleel
Email: edw.nazhon.khaleel @uoanbar.edu.iq

8. Course Objectives

Course Objectives	**1- Networks security basics** **2- E-Commerce** **3- Identify common hardware and software problems in computers.** **4- Define Artificial Intelligence (AI)** **5- Applications of AI** **6- Ethical Challenges in AI** **7- the Future of AI**

9. Teaching and Learning Strategies

Strategy	1- Smart Board &Blackboard 2- Data Show 3- Computer 4- Scientific research 5- Theoretical lectures

	6- Scientific Laboratories 7- Discussion and dialogue

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	As in paragraph 8	Security& Networking	Blackboard data show	Question and discussion+ Daily and monthly exams
2	2	As in paragraph 8	Security& Networking	Blackboard data show	Questions and discussion+ Daily and monthly exams
3	2	As in paragraph 8	E-Commerce	Blackboard data show	Questions and discussion+ Daily and monthly exams
4	2	As in paragraph 8	E-Commerce	Blackboard data show	Questions and discussion+ Daily and monthly exams
5	2	As in paragraph 8	Computer Troubleshooting	Blackboard data show	Questions and discussion+ Daily and monthly exams
6	2	As in paragraph 8	Computer Troubleshooting	Blackboard data show	Questions and discussion+ Daily and monthly exams
7			**First month exam**		
8	2	As in paragraph 8	Introduction to AI	Blackboard data show	Questions and discussion+ Daily and monthly exams
9	2	As in paragraph 8	AI in Our Daily Lives	Blackboard data show	Questions and discussion+ Daily and monthly exams
10	2	As in paragraph 8	Applications of AI	Blackboard data show	Questions and discussion+ Daily and monthly exams
11	2	As in paragraph 8	Applications of AI	Blackboard data show	Questions and discussion+ Daily and monthly exams
12			**Second month exam**		
13	2	As in paragraph 8	AI and Society	Blackboard data show	Questions and discussion+ Daily and monthly exams
14	2	As in paragraph 8	Ethical Challenges in AI	Blackboard data show	Questions and discussion+ Daily and monthly exams
15	2	As in paragraph 8	The Future of AI	Blackboard data show	Questions and discussion+ Daily and monthly exams

11. Course Evaluation

Distribution of the grade out of 100 according to the tasks assigned to the student,
Annual pursuit 40% (Monthly exam : 20% , Daily exam : 5% , Reports : 5% , Practical exam : 10%)
Final exam : 60%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (source)	Banafa, A. (2024). *Introduction to Artific*

	Intelligence (AI) (1st ed.). Independently Published
Recommended books and references (scientific journals, reports…)	1. Brown, G., & Watson, D. (2020). *Cambric IGCSE Information and Communicati Technology* (3rd ed.). Hodder Education. 2. Evans, A., Martin, K., & Poatsy, M. (2020). *Technology in Action Complete* (16 ed.). Pearson.
Electronic references, websites.	websites.

Course Description

1- Course Name: Develop ment psycology
2- Course Code: : Develop ment psycology
3- Semester / Year:2024-2025
4- Date this description was prepared: 16/2/2025
5- Available attendance forms:my presence
6- Number of study hours (total)\number of units (total):14 o'clock
7- Name of the official judge (if more than one name is prohibited) hala kudier sucker
8- Course objectives:

Objectives of the study subject:	• * tughatiy hadhih almadat almanahij aldirasiat watatawuraha * alnaerif ealaa ahim ma yumayiz bayn almanhaj alqadim walhadith * alalmam bibaed tarayiq altadris almutabaeat min qibal altadrisii
9. Teaching and learning strategies	
The strategy	af almaerifiat :- an tariffs altaalibat eilm alarshad binaweih wan tuadih altaalibat ahimiat alarshad __ tubdi altaalibat rayha hawl alaikhtibarat alahdaf almaharatiat :- an tumaris altaalibat siaghat aliahdaf _ an tunaqish altaalibat mumayizat aliakhtibarat alahdaf alwijdaniat :- tatwir qudrat altaalib ealaa aleamal _ altafkir almantiqiu _ an yatahamas altaalib alaa akhudh dawr aldurus

10- Course structure

Week	Hours	Required	Name of the unit or	Learning	Evaluation

		learning outcomes	topic	method	method
The First	2	In the ninth paragraph	**Introduction to Developmental Psychology**	Theoretical	Theoretical question and discussion
The Secon	2	In the ninth paragraph	**Study Importance ofDevelopmental psychology**	Theoretical	Theoretical question and discussion
The Third	2		**Growth and Maturity and Development**	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	**The Effective Factors on the Development**	Theoretical	Theoretical question and discussion
The fifth	2		**Important legacies**	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	**Environment**	Theoretical	Theoretical question and discussion
The sevent	2		**Food**	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	**Childhood**	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	**Language growth**	Theoretical	Theoretical question and discussion
The ten	2	One oclock ck	In the ninth paragraph		Theoretical question and discussion
	2				Theoretical question and discussion
	2				Theoretical question and discussion
					Theoretical question and discussion
					Theoretical question and discussion

Course Description

1. Course Name:
Invertebrates 1
2. Course Code:
EWb3201
3. Semester / Year:
Semester
4. Description Preparation Date:
2024–2025
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Assist.Prof. Dr. Nagam Khudhair Mahdi & Iman Fouad Mouloud Email: edw.nagam1980_2005@uoanbar.edu.iq
8. Course Objectives

Course Objectives	**• Introducing students to the origin and development of invertebrate animals and their importance** **• In addition to studying all invertebrate anima phyla** **• Identify the distinctive characteristics of eacl division, classify them, and discuss some of them • Important models in detail and for each division.** **• Introducing students to the importance of invertebrates, their harms, and their related species**

9. Teaching and Learning Strategies

Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student groups, 4- Practical lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	General introduction t invertebrates And its importance	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
2	4	Originand developm of invertebrate animal	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
3	4	The major groups of animals are numerous cells	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
4	4	Primary Division - its characteristics And its classification	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
5	4	Movement organelles and types of reproduct And colony formation Primary school	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
6	4	First month exam	Invertebrates 1		Theoretical test Practical tests Reports
7	4	Examplesofthe gen Amoeba Paramecium	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
8	4	The division of sponge their general characteristics and classification	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
9	4	The most import genera of spon (sponges - Venus flo basket - Cycon)	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
10	4	Cnidaria phylum, its general characteristics and classification	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
11	4	Hydra-aurelia-metridi The most important cycles	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
12	4	Second month exam	Invertebrates 1		Theoretical test Practical tests

					Reports
13	4	The phylum flatworms and th general characteristi	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
14	4	Complete classificat of the most import genera of flatworms	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
15	4	Planaria - sheep liver worm - Taenia And the medi importance of the division	Invertebrates 1	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,...etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Invertebrate science - Murad Baba Mur Invertebrates - Sharuk Practical invertebrates book Invertebrate Zoology- E,L,GORDAN P,S,VERMA
Main references (source)	Invertebrate science - Murad Baba Mur Invertebrates - Sharuk Practical invertebrates book Invertebrate Zoology- E,L,GORDAN P,S,VERMA
Recommended books and references (scientific journals, reports…)	Obscure Practical Parasitology, Obscure Practical Invertebrates, General Entomological Book Invertebrate Biology\Dr. Muhamm Hassan Al-Hamoud
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
Invertebrates 2
2. Course Code:
EWb3202
3. Semester / Year:
Semester
4. Description Preparation Date:
2024−2025
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Assist.Prof. Dr. Nagam Khudhair Mahdi & Iman Fouad Mouloud Email: edw.nagam1980_2005@uoanbar.edu.iq
8. Course Objectives

Course Objectives	**• Introducing students to the origin and development of invertebrate animals and their importance** **• In addition to studying all invertebrate anima phyla** **• Identify the distinctive characteristics of eacl division, classify them, and discuss some of them • Important models in detail and for eacl division.** **• Introducing students to the importance of invertebrates, their harms, and their related species**

9. Teaching and Learning Strategies

Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student groups, 4- Practical lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	The phylum bagworms, importance classification	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
2	4	The most important genera of bagworms Ascaris - Trichinella	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
3	4	Pinworms and their lif cycle New Guinea worm	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
4	4	Classification nematodes	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
5	4	Division of annelids Its importance classification	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
6	4	First month exam	Invertebrates 2		Theoretical test Practical tests Reports
7	4	Examples Genera of earthwo medical leech, sandworm	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
8	4	The arthropod phylum its general characterist and importance	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
9	4	The most important ty of arthropods Some of its species, s as water fleas, scorpic and spiders...	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
10	4	Phylum Mollusca, their general characteristics a classification	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports
11	4	Snails - oysters - octop The most important cycles	Invertebrates 2	Explanation presentation of slide model lecture	Theoretical test Practical tests Reports

12	4	Second month exam	Invertebrates 2		Theoretical test Practical tests Reports
13	4	Thephylum Echinodermata and general characteristi	Invertebrates 2	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
14	4	Echinodermata gene Starfish and cucumber	Invertebrates 2	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
15	4	Division Hemichordata	Invertebrates 2	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Invertebrate science - Murad Baba Mur Invertebrates - Sharuk Practical invertebrates book Invertebrate Zoology- E,L,GORDAN P,S,VERMA
Main references (source)	Invertebrate science - Murad Baba Mur Invertebrates - Sharuk Practical invertebrates book Invertebrate Zoology- E,L,GORDAN P,S,VERMA
Recommended books and references (scientific journals, reports…)	Obscure Practical Parasitology, Obscure Practical Invertebrates, General Entomological Book Invertebrate Biology\Dr. Muhamm Hassan Al-Hamoud
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
General Arabic
2. Course Code:
Ewb 1202
3. Semester / Year:
2024 / 2025
4. Description Preparation Date:
2024 /12 / 1
5. Available Attendance Forms:
Classroom
6. Number of Credit Hours (Total) / Number of Units (Total)
Number of Credit Hours : 2 Number of Units : 2
7. Course administrator's name (mention all, if more than one name)
Name: Assist lect. Inas Hameed Nida Email: inas.hameed@uoanbar.edu.iq
8. Course Objectives

Course Objectives	**1. Improve the quality of academic and functional writing associated with school education.** **2. Correct common spelling mistakes and the use of punctuation marks.** **3. Apply grammar and spelling rules in writing sentences and paragraphs in correct language.** **4. Analysis of the structure of educational and pedagogical texts in terms of style and meaning** **5. Develop confidence in written and oral expression in teaching and learning situations.**
9. Teaching and Learning Strategies	
Strategy	1.Solving direct applied exercises: to train the student to employ grammar and spelling rules. 2.Individual class presentations: to train students on proper pronunciation and eloquent presentation. 3.Gradual training of sound writing in terms of form and meaning. 4.Group activities: such as brainstorming and correcting common mistakes in texts.

	5.Continuous feedback: written and oral on language performance.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Week 1	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Rules for writing soft, redundant and deleted alphanumerics	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 2	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Open and bound t-writing rules	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 3	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Condition style	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 4	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes,	Texts of nature poetry	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports

		while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.			
Week 5	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Ditransitive Verb	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 6	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Sources	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 7	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Texts from the literature of letters	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 8	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct	Text from the Holy Quran (Surat Al-Imran)	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports

		common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.			
Week 9	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Texts from the literature of oratory	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 10	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Derivatives (subject name, object name)	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 11	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Derivatives (adjective-like) formulation and action	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 12	2	Developing students ' basic language skills, enhancing their ability to analyze	Texts of historical poetry	The blackboard, the method of class participation and the method of	Daily tests +assignments +reports

		texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.		diction	
Week 13	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Imperfect, imperfect and elongated	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 14	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Exclamation style	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports
Week 15	2	Developing students ' basic language skills, enhancing their ability to analyze texts and correct common mistakes, while consolidating the communicative and cultural function of the Arabic language in educational and professional contexts.	Texts of sentimental poetry	The blackboard, the method of class participation and the method of diction	Daily tests +assignments +reports

11. Course Evaluation	
Attendance and class participation 10% Written exercises and functions 10% Written test %20 Final Test 60 %	
12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	General Arabic language for non-specialized departments, Abdulkader Hassan, Dr. Mohammed Hussein, Dr. Qahtan Rashid
Main references (source)	• Arabic grammar, Ibrahim Barakat • Spelling and punctuation between theory and practice-D. Sami Abu Shahba
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1- Course Name: Educational planning
2- Course Code: :
3- Semester / Year:2024-2025
4- Date this description was prepared: 22/2/2024
5- Available attendance forms:my presence
6- Number of study hours (total)\number of units (total): 15 weeks
7- Name of the official judge (if more than one name is prohibited) Walid Ahmed Abd
8- Course objectives:

Objectives of the study subject:	1- 1. Knowledge of Educational Planning 2- 2. Educational Planning in Addressing Educational Problems 3- 3. Quantitative Methods of Educational Planning
9. Teaching and learning strategies	
The strategy	Cognitive objectives: To familiarize the student with educational planning, its types, and methods. Skill objectives: To solve problems in light of educational planning. Affective objectives: To develop the student's ability to work in harmony with the emotional aspect of educational planning.
10- Course structure	

Week	Hours	Required learning	Name of the unit or topic	Learning method	Evaluation method

		outcomes			
The First	2	In the ninth paragraph	Educational planning concepts	Theoretical	Theoretical question and discussion
The Secon	2	In the ninth paragraph	Types of educational planning	Theoretical	Theoretical question and discussion
The Third	2		Quantitative methods of educational planning	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	Educational planning after quality	Theoretical	Theoretical question and discussion
The fifth	2		The role of educational planning in treating educational problems	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	Planning for Higher Education in Arab Countries	Theoretical	Theoretical question and discussion
The sevent	2		Educational planning in Arab countries	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	a test	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Statistics in educational planning	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	The relationship between statistics and educational planning	Theoretical	Theoretical question and discussion
The eleven	2	In the ninth paragraph	Educational administration in light of planning	Theoretical	Theoretical question and discussion
The twelve	2	In the ninth paragraph	The development of management in light of educational planning	Theoretical	Theoretical question and discussion
The thirteer	2	In the ninth paragraph	Test 2	Theoretical	Theoretical question and discussion
The fourtee	2	In the ninth paragraph	review	Theoretical	Theoretical question and discussion
The fifteen	2	In the ninth paragraph	review	Theoretical	Theoretical question and discussion

Course Description

1. Course Name:
Basics of general entomology
2. Course Code:
EWB3302
Semester / Year:
Semester
Description Preparation Date:
2024 - 2025
Available Attendance Forms:
weekly
Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
Course administrator's name (mention all, if more than one name)
Name: Lecture Dr. Imtithal Ismael Jaloot, I' man Fouad & Ghufran Taha Email: Edw.kaliomer2004@uoanbar.edu.iq

Course Objectives	
Course Objectives	Introducing students to the shape, behavior, nature and habits of insects the diversity of their members and their spread in all environments and various places; In the soil, in cold and hot regions. Identifying the morphological characteristics of insects and their internal structure

Teaching and Learning Strategies	
Strategy	Explanation and clarification 2- The method of the lecture 3- Student groups 4- Practical lessons in the laboratory and scientific trips .

Course Structure

Week	Hrs	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Introduction to the position of insects in the animal kingdom and theories of the emergence of insects and their importance	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports

2	4	Morphology of insects	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
3	4	The thorax and appendages	Basics of general entomology	Explanation and presentation of the slide model a lecture	Theoretical tests Practical test Reports
4	4	The abdominal and appendage	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
5	4	The first exam	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
6	4	The Respiratory system	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
7	4	The Digestive System	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
8	4	The Excretory organs	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
9	4	The Reproductive System	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
10	4	The Nervous System	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
11	4	The Circulatory System	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
12	4	Sensory organs in insects	Basics of general entomology	Explanation and presentation Of the slide	Theoretical tests Practical test

				Model and lecture	Reports
13	4	Development & metamorphosi	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
14	4	Classification of insects	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
15	4	The second exam	Basics of general entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports

Course Evaluation
Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc. Monthly exams 25 marks Daily preparation, daily exams and reports 5 marks Practical exam: 10 marks Strive 40 degrees Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

Learning and Teaching Resources	
Required textbooks (curricular books, if any)	General entomology Written by: Hussein Abbas Al-Ali, d. Nidal Mahdi Al Fund Practical Entomology Book By Abdul Latif Mulan
Main references (source)	Principle Of General Entomology By Pr. Bedir M. Al. Azawi
Recommended books and references (scientif journals, reports…)	The Insects: An Outline of Entomology, 4th Edition By P. J. Gullan & P.S. Cranston
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
Applied Entomology
2. Course Code:
EWB3308
Semester / Year:
Semester
Description Preparation Date:
2024 - 2025
Available Attendance Forms:
weekly
Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
Course administrator's name (mention all, if more than one name)
Name: Lecture Dr. Imtithal Ismael Jaloot, I' man Fouad & Ghufran Taha Email: Edw.kaliomer2004@uoanbar.edu.iq

Course Objectives	
Course Objectives	Introducing students to the shape, behavior, nature and habits of insects, the diversity of their members and their spread in all environments and various places Recognizing the medical importance o insect species through their presence on t various previously mentioned places, an what caused huge losses to agricultura crops

Teaching and Learning Strategies	
Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student groups, 4 Practical lessons in the laboratory and scientific trips, 5- Brainstorming

Course Structure

Week	Hour	Required Learning	Unit or subjec	Learning metho	Evaluation

		Outcomes	name		method
1	4	Introduction of Economic & medical entomology meaning…importanc …etc.	Applied Entomology	Explanation and presentation of th slide model and lecture	Theoretical tests Practical test Reports
2	4	Important economic insects in Ir	Applied Entomology	Explanation and presentation of th slide model and lecture	Theoretical tests Practical test Reports
3	4	Pest Control Method	Applied Entomology	Explanation and presentation of th slide model and lecture	Theoretical tests Practical test Reports
4	4	Methods of transmitting pathogenic microbes for humans and animals	Applied Entomology	Explanation and presentation of th slide model and lecture	Theoretical tests Practical test Reports
5	4	Pulex types of medicinal and veterinary importanc	Applied Entomology	Explanation and presentation of th slide model and lecture	Theoretical tests Practical test Reports
6	4	Culicidae family, types of Culex and control methods	Applied Entomology		Theoretical tes Practical test Reports
7	4	Annulatus types of medicinal and veterinary importanc	Applied Entomology	Explanation and presentation of th slide model and lecture	Theoretical tests Practical test Reports
8	4	First month exam	Applied Entomology	Explanation and presentation of th slide model and lecture	Theoretical tests Practical test Reports
9	4	Diptera order of medicinal and veterinary importanc	Applied Entomology	Explanation and presentation of th slide model and lecture	Theoretical tests Practical test Reports
10	4	House fly, life cycle, types of fly and	Applied Entomology	Explanation and presentation of th slide model and	Theoretical tests Practical test

		control methods		lecture	Reports
11	4	Insecticides	Applied Entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
12	4	Insects behavior	Applied Entomology		Theoretical tests Practical test Reports
13	4	Social relationships between insects	Applied Entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports
14	4	Insect environment	Applied Entomology	Explanation and presentation the slide model a lecture	Theoretical tests Practical test Reports
15	4	Second month exam	Applied Entomology	Explanation and presentation of the slide model and lecture	Theoretical tests Practical test Reports

Course Evaluation
Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc. Monthly exams 25 marks Daily preparation, daily exams and reports 5 marks Practical exam: 10 marks Strive 40 degrees Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Specialization book Environmental Protection - Theoretical medical and veterinary insects https://drive.google.com/file/d/1PC4zEC7nBYIcI4oDR4sI CEZpveERdF7/view Environmental Protection Specialization Book - Practical Medical and Veterinary Insects https://drive.google.com/file/d/1F8PgpvGoaNrSgo8AhFjA3 UEgcJ8ue/view

Main references (source)	Practical Medical Entomology By Pr. Dr. Abdul-lateef Molan
Recommended books and references (scientifi journals, reports…)	Fundamentals of medical and veterinary entomology Written by Prof. Dr.: Mr. Hassan Shorb Professor Zo, Head of Entomology Department, Faculty of Science - Cairo University 2013
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
Teaching methods
2. Course Code:
Teaching methods
3. Semester / Year:
First and second 2024-2025
4. Description Preparation Date:
16 -9-2024
5. Available Attendance Forms:
My presence
6. Number of Credit Hours (Total) / Number of Units (Total)
15hour
7. Course administrator's name (mention all, if more than one name)
Name: Walid Ahmed Abdel Email:
8. Course Objectives

Course Objectives	• **Providing students with knowle of methods** • **Mastering the teaching skills strategies included therein** • **Recognizing the message of muslim teacher in society …..**

9. Teaching and Learning Strategies	
Strategy	Lecture and discussion

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1 2 3	2 2 2	Understanding concebt of scienc Understanding	Sciend	Lecture and discussi	Oral questions

4 5 6 7 8 9 10 11 12 13 14 15	2 2 2 2 2 2 2 2 2 2 2 2	concebt of of nature of science Understanding concebt of goals Understanding concebt educational objectives Understand the concept of spe purposes Understand the concept o of gen purposes Understanding concept of curriculum Understanding concept of the old curriculum Understanding concept of mod methodology Understand the concept of positives and negatives of the curriculum Understanding concept of modern teaching methods Understand the concept of Lect and and discussi Lntroduction methods of teach people with spe needs Categories of pe with special ne and ordinary peo	the nature science objectives objectives private public curriculum old hadith pros and cons of approach Lecture discussion methods of teach people with spe needs Categories of pe with special nee	Lecture and discussi Lecture and discussi Lecture and discussi Lecture and discussi	

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc.

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Curricula and teaching methods book teaching and teaching methods book lntroduction to General teaching methods
Main references (source)	
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Microbiology1
2. Course Code:
EWb3305
3. Semester / Year:
First Semester / third year
4. Description Preparation Date:
1/12/2024
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Hanaa Abdullatif yassin Email: edw.hanatreek@uoanbar.edu.iq
8. Course Objectives

Course Objectives	-That the student understand what is meant by microbiology, its origin and development as a science of life. -To know what are the divisions of microbiology -That the student knows the isolation and diagnosis of microorganisms. -To know the structure of the bacterial cell, whether positive or negative for the gram stain, and the function of each of the structures of the bacterial cell

9. Teaching and Learning Strategies

Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student groups, 4- Practical lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Introduction to microbiology	microbiology	Scientific Lecture	Daily exam and monthly

					exam
2	4	**Classification of microorganisms**	=	=	=
3	4	Bacterial isolation and identification	=	=	=
4	4	cellular structures	=	=	=
5	4	Fungi	=	=	=
6	4	Viruses	=	=	=
7	4	Exam	=	=	=
8	4	**Nutrition of Microorganisms**	=	=	=
9	4	**Cultivation of Microorganism**	=	=	=
10	4	Bacterial growth and growth curve	=	=	=
11	4	**Microbial physiolog**	=	=	=
12	4	Exam	=	=	=
13	4	**Control of Microorganisms b physical**	=	=	=
14	4	Control of microorganisms by chemical means:	=	=	=
15	4	Antibiotics	=	=	=

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc.
Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Microbiology Books / Hamid Al-Zaidi
Main references (source)	**General Microbiology Books**
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
Archegoniates
2. Course Code:
EWB32O6
3. Semester / Year:
2025/2024
4. Description Preparation Date:
2025/2024
5. Available Attendance Forms:
Classroom and Laboratory
6. Number of Credit Hours (Total) / Number of Units (Total)
Number of Credit Hours : 2 Number of Units : 2
7. Course administrator's name (mention all, if more than one name)
Name: Ass. Proff Abdul-Nasir Abdulla Mahdi &Ass.T.Rana Salim Farhan Email: edw.nasir63abdulla@uoanbar.edu.iq&rana.s.farhan@uoanbar.edu.iq
8. Course Objectives

Course Objectives	**Identify Archegoniates** **Its iocation in the plant kingdom** **Its classification , presence , and methods of reproduction** **Its benefits and harms .**
9. Teaching and Learning Strategies	
Strategy	1- Daily and monthly testes 2- Writing reports related to the material . 3- Ask questions and discuss them with students . 4- Assigning students to search for the latest developme in the subject on websites 5- Use of electronic clarification means.
10. Course Structure	

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Week 1	2	To prepare the student to be a successful biolo teacher or researcher	**Introduction**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 2	2	To prepare the student to be a successful biology teacher researcher	**Bryophytes Classification – Riccia**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 3	2	To prepare the student to be a successful biology teacher researcher	**Marchantia**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 4	2	To prepare the student to be a successful biology teacher researcher	**Pellia**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 5	2	To prepare the student to be a successful biology teacher researcher	**Anthceros**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 6	2	To prepare the student to be a successful biology teacher researcher	**Monthly Exam**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 7	2	To prepare the student to be a successful biology teacher researcher	**Sphagnum**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 8	2	To prepare the student to be a successful biology teacher researcher	**Funaria**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 9	2	To prepare the student to be a successful biology teacher researcher	**Pteridophytes – Psilotum**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests

Week 10	2	To prepare the student to be a successful biology teacher researcher	**Lycopodium**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 11	2	To prepare the student to be a successful biology teacher researcher	**Equisetum**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 12	2	To prepare the student to be a successful biology teacher researcher	**Adiantum**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 13	2	To prepare the student to be a successful biology teacher researcher	**Monthly Exam**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 14	2	To prepare the student to be a successful biolo teacher or researcher	**Salvinia**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 15	2	To prepare the student to be a successful biolo teacher or researcher	**Gymnospermae**	Lecture , electroni presentation and discussion	Theoretical question , discussions , and oral tests

11. Course Evaluation

Monthly exam : 20% , Daily exam : 5% , Reports : 5% , Practical exam : 10% , Final exam : 60%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1- Algae and Archegoneates by dr. Bahr K.M. and Dr. Ali H. Al-Saadi 2- Website
Main references (source)	Lectures led by the subject professor
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:

Ecology and pollution

2. Course Code:

qe27ywb

3. Semester / Year:

Semester

4. Description Preparation Date:

2025−2024

5. Available Attendance Forms:

weekly

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

2 theoretical hours + 2 practical hours = (4 hours) per week
Number of units (3)

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

Name: Assist.Prof. Dr. Mohammed musleh &berka hmood
mohammed.musleh@uoanbar.edu.iq

8. Course Objectives

Course Objectives
Introduce the student to the principles of ecology and the relationship of living organisms with non –living components and the effect of each factor on the other
Learn about the different types of ecosystem.
Learn about living environmental factors.

9. Teaching and Learning Strategies

Strategy	1- Explanation and clarification, 2- Lecture method, 3- Stu lent lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	
1	1	A historical overview of Sustainability	Sustainability	E p th

				a
2	1	Principles and goals of Sustainability	Sustainability	E p th a
3	1	Sustainable development	Sustainability	E p th a
4	1	Environmental protection field	Sustainability	E p th a
5	1	Sustainability in natural resource management	Sustainability	E p th a
6	1	First month exam	Sustainability	
7	1	Productivity	Sustainability	E p th a
8	1	Food chin	Sustainability	E p th a
9	1	Nets chin	Sustainability	E p th a
10	1	Energy of pyramids	Sustainability	E p th a
11	1	population	Sustainability	E p th a
12	1	Second month exam	Sustainability	
13	1	Environmental **suc**cession	Sustainability	E p th a

14	1	Environmental factor	Sustainabi	E p th a
15	1	Species divergence	Sustainabi	E p th a

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily prepar tion, written exams, reports,...etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

	Al-raw i , n Abl-al ahee asheer (198 pollut on U
Main references (source)	Al-raw i , n Abl-al ahee asheer (198 pollut on U
Recommended books and references (scientific journals, reports…)	Obscu e Pr
Electronic references, websites.	Use lect websi es

Course Description

1. Course Name:

Ecology and Pollution2

2. Course Code:

b43aagq

3. Semester / Year:

Semester

4. Description Preparation Date:

2025−2024

5. Available Attendance Forms:

weekly

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

2 theoretical hours + 2 practical hours = (4 hours) per week
Number of units (3)

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

Name: Assist.Prof. Dr. Mohammed musleh &berka hmood
mohammed.musleh@uoanbar.edu.iq

8. Course Objectives

Course Objectives

Introduction the student to the sources of pollution and thi3r danger to humans and how to treat than
Identifying environmental pollution of all kinds knowing source and to how to treat it
Knowing the pollution substance or energy and the extent of its impact.
Studying the dangers of pollution of all kinds and their impact on humans .

9. Teaching and Learning Strategies

Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student g lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name
1	4	Abrief history of pollution	Environmenta pollution
2	4	*Effects of Environmental pollution*	Environmenta pollution
3	4	Air pollution	Environmenta pollution
4	4	Noise pollution	Enviro nmen pollu ti
5	4	Radiation pollution	Enviro nmen pollu ti
6	4	First month exam	Enviro nmen pollu ti
7	4	Water pollution	Enviro nmen pollu ti
8	4	Food contamination	Enviro nmen pollu ti
9	4	Microbiology contamination	Enviro nmen pollu ti
10	4	Soil pollution	Enviro nmen pollu ti

11	4	The ozone	Enviro nmen olluti
12	4	Second month exam	Enviro nmen olluti
13	4	Global warming	Enviro nmen olluti
14	4	Drug contamination	Enviro nmen olluti
15	4	Global pollution	Enviro nmen pollut on

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparati n, da exams, reports,…etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

	Al- awi Abl alra ash eer(pol utio
Main references (source)	Al- awi Abl alra ash eer(pol utio
Recommended books and references (scientific journals, reports…)	Ob cure

Electronic references, websites.	Use el website

Course Description

1- Course Name: Curricula and textbooks	
2- Course Code: :	
3- Semester / Year:2024-2025	
4- Date this description was prepared: 13/2/2024	
5- Available attendance forms:my presence	
6- Number of study hours (total)\number of units (total):30 o'clock	
7- Name of the official judge (if more than one name is prohibited) Walid Ahmed Abd	
8- Course objectives:	
Objectives of the study subject:	Understanding the concept of curriculum Comparing the old and modern curriculum • Curricula and their development
9. Teaching and learning strategies	Learning to Mastery Strategy Problem–Solving Method Inductive Method
The strategy	Cognitive objectives: Understanding thinking, its types and theories. Skill objectives: Thinking skills. Affective objectives: Developing the student's ability to work and think logically. Encouraging the student to take turns in lessons.
10- Course structure	

Week	Hours	Required	Name of the unit or	Learning	Evaluation

		learning outcomes	topic	method	method
The First	2	In the ninth paragraph	The concept of curriculum	Theoretical	Theoretical question and discussion
The Secon	2	In the ninth paragraph	The old concept of method and the modern concept	Theoretical	Theoretical question and discussion
The Third	2	-	Comparison between the modern and ancient concept of the curriculum	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	Curriculum elements	Theoretical	Theoretical question and discussion
The fifth	2		Curriculum development in secondary education	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	Curriculum construction and development	Theoretical	Theoretical question and discussion
The sevent	2		Curriculum evaluation	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	a test	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Curriculum evaluation forms	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Curriculum evaluation	Theoretical	Theoretical question and discussion
The eleven	2	In the ninth paragraph	What is meant by curriculum evaluation?	Theoretical	Theoretical question and discussion
The twelve	2	In the ninth paragraph	The teacher and the curriculum	Theoretical	Theoretical question and discussion
The thirteer	2	In the ninth paragraph	Test	Theoretical	Theoretical question and discussion
The fourtee	2	In the ninth paragraph	Textbook analysis	Theoretical	Theoretical question and discussion
The fifteen	2	In the ninth paragraph		Theoretical	Theoretical question and discussion

Course Description

1. Course Name:
comparative anatomy of chordate 1
Course Code:
2.
EWB3301
3. Semester / Year:
Year\ first
4. Description Preparation Date:
2024-2025
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Hanan Fawzi Salman Email: hanan. fawzi@uoanbae.edu.iq
8. Course Objectives

Course Objectives	• Students learned about the most impor phyla included in the classification chordates • Students learned about compari between animals through internal anato and comparison of their systems and orga • In addition to studying all types and orc of animal groups • Introducing students to the most impor characteristics and characteristics chordates..... .
9. Teaching and Learning Strategies	
Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student groups, 4- Practical lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Cgaracteristics of chordates	chordat	Explanation presentation the slide mc and lecture	Theoretical tests Practical tests Repor ts

2	4	Tetrapoda group	chorda	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
3	4	Protochordata	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
4	4	Amphiouxes	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
5	4	Amphibians	Chorda	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
6	4	First month exam	chordat		Theoretical tests Practical tests Reports
7	4	Reptile class	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
8	4	Aves class	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
9	4	Feathers and leather appendag	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
10	4	Mammlia class	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
11	4	Placental mammals	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
12	4	Second month exam	chordat		Theoretical tests Practical tests Reports
13	4	Accessory gland of the skin in mamm	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
14	4	Ruminants	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
15	4	Digestive mechanism in ruminants	chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
11. Course Evaluation					

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	-Basics of comparative anatomy of chordates / wri by Shukri Habib Khalil, Abdul Zahra Kazem
Main references (source)	Book: Comparative Anatomy of Vertebrates Wri by: Dr. Mona Farid Abdel Rahman
Recommended books and references (scientific journals, reports…)	Atlas of comparative anatomy of chordates
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
comparative anatomy of chordate 2
Course Code: 2.
EWB3301
3. Semester / Year:
Year\ second
4. Description Preparation Date:
2024-2025
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Hanan Fawzi Salman Email: hanan. fawzi@uoanbae.edu.iq
8. Course Objectives

Course Objectives	• Students learned about the most impor phyla included in the classification chordates • Students learned about compari between animals through internal anato and comparison of their systems and orga • In addition to studying all types and orc of animal groups • Introducing students to the most impor characteristics and characteristics chordates..... .
9. Teaching and Learning Strategies	
Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student groups, 4- Practical lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	General features chordata	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Repor ts

2	4	group of vertebrates	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
3	4	Chordata classificat	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
4	4	Skin system	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
5	4	Skeletal system	Chordat	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
6	4	First month exam	chordata		Theoretical tests Practical tests Reports
7	4	Nerves system	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
8	4	Digestive system	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
9	4	Circulation of syste	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
10	4	Pulmantory systrm	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
11	4	Muscular system	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
12	4	Second month exam	chordata		Theoretical tests Practical tests Reports
13	4	excretory system	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
14	4	Reproductive syster	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
15	4	Sense organs	chordata	Explanation presentation the slide mo and lecture	Theoretical tests Practical tests Reports
11. Course Evaluation					

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc. **Monthly exams 25 marks** **Daily preparation, daily exams and reports 5 marks** **Practical exam: 10 marks** **Strive 40 degrees** **Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks**

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	-Basics of comparative anatomy of chordates / wri by Shukri Habib Khalil, Abdul Zahra Kazem
Main references (source)	Book: Comparative Anatomy of Vertebrates Wri by: Dr. Mona Farid Abdel Rahman
Recommended books and references (scientific journals, reports…)	Atlas of comparative anatomy of chordates
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
Algae
2. Course Code:
EWb3204
3. Semester / Year:
2025/2024
4. Description Preparation Date:
2025/2024
5. Available Attendance Forms:
Classroom and Laboratory
6. Number of Credit Hours (Total) / Number of Units (Total)
Number of Credit Hours : 2 Number of Units : 2
7. Course administrator's name (mention all, if more than one name)
Name: Ass. Proff Abdul-Nasir Abdulla Mahdi & Ass.T.Rana Salim Farhan Email: edw.nasir63abdulla@uoanbar.edu.iq&rana.s.farhan@uoanbar.edu.iq
8. Course Objectives

Course Objectives	**Identify algae** **Its iocation in the plant kingdom** **Its classification , presence , and methods of reproduction** **Its benefits and harms .**
9. Teaching and Learning Strategies	
Strategy	1- Daily and monthly testes 2- Writing reports related to the material . 3- Ask questions and discuss them with students . 4- Assigning students to search for the latest developme in the subject on websites 5- Use of electronic clarification means.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
Week 1	2	To prepare the student to be a successful biolo teacher or researcher	**Introduction**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 2	2	To prepare the student to be a successful biology teacher researcher	**The Basis of Classification o Algae**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 3	2	To prepare the student to be a successful biology teacher researcher	**General Classification o Algae**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 4	2	To prepare the student to be a successful biology teacher researcher	**Divition : Chlorophyta**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 5	2	To prepare the student to be a successful biology teacher researcher	**Order : Tetrasporales**	Lecture , electro presentation and discussion	Theoretical question , discussions , and oral tests
Week 6	2	To prepare the student to be a successful biology teacher researcher	**Order : Zygnematales**	Lecture , electro presentation and discussion	Theoretical question , discussions , and oral tests
Week 7	2	To prepare the student to be a successful biology teacher researcher	**Monthly Exan 1**	Lecture , electro presentation and discussion	Theoretical question , discussions , and oral tests
Week 8	2	To prepare the student to be a successful biology teacher researcher	**Divition : Chrysophyta (Golden Algae)**	Lecture , electro presentation and discussion	Theoretical question , discussions , and oral tests
Week 9	2	To prepare the student to be a successful biology teacher	**Class : Bacillariophyceae Diatoms)**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests

		researcher			
Week 10	2	To prepare the student to be a successful biology teacher researcher	**Divition : Pyrrophyta**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 11	2	To prepare the student to be a successful biology teacher researcher	**Class : Heterogenerate**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 12	2	To prepare the student to be a successful biology teacher researcher	**Monthly Exam. 2**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 13	2	To prepare the student to be a successful biology teacher researcher	**Division : Rhodophyta**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 14	2	To prepare the student to be a successful biolo teacher or researcher	**Ecological and Economic Importance of Alg**	Lecture , electron presentation and discussion	Theoretical question , discussions , and oral tests
Week 15	2	To prepare the student to be a successful biolo teacher or researcher	**Monthly Exam.**	Lecture , electroni presentation and discussion	Theoretical question , discussions , and oral tests

11. Course Evaluation

Monthly exam : 20% , Daily exam : 5% , Reports : 5% , Practical exam : 10% , Final exam : 60%

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	1- Algae and Archegoneates by dr. Bah K.M. and Dr. Ali H. Al-Saadi 2- Website
Main references (source)	Lectures led by the subject professor
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Teaching methods 1
2. Course Code:
Teaching methods
3. Semester / Year:
First and second 2024-2025
4. Description Preparation Date:
16 -9-2024
5. Available Attendance Forms:
My presence
6. Number of Credit Hours (Total) / Number of Units (Total)
15hour
7. Course administrator's name (mention all, if more than one name)
Name: Walid Ahmed Abdel Email:
8. Course Objectives

Course Objectives	• **Providing students with knowle of methods** • **Mastering the teaching skills strategies included therein** • **Recognizing the message of muslim teacher in society …..**

9. Teaching and Learning Strategies	
Strategy	Lecture and discussion

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1 2 3	2 2 2	Understanding concebt of scienc Understanding	Sciend	Lecture and discussi	Oral questions

4 5 6 7 8 9 10 11 12 13 14 15	2 2 2 2 2 2 2 2 2 2 2 2	concebt of of nature of science Understanding concebt of goals Understanding concebt educational objectives Understand the concept of spe purposes Understand the concept o of gen purposes Understanding concept of curriculum Understanding concept of the old curriculum Understanding concept of mod methodology Understand the concept of positives and negatives of the curriculum Understanding concept of modern teaching methods Understand the concept of Lect and and discussi Lntroduction methods of teach people with spe needs Categories of pe with special ne and ordinary peo	the nature science objectives objectives educational private public curriculum old hadith pros and cons of approach Lecture discussion methods of teach people with spe needs Categories of pe with special nees	Lecture and discussi Lecture and discussi Lecture and discussi Lecture and discussi	

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc.

12. Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Curricula and teaching methods book teaching and teaching methods book lntroduction to General teaching methods
Main references (source)	
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Genetics 1
2. Course Code:
EWB3303
3. Semester / Year:
First Semester / 2024
4. Description Preparation Date:
- Adding new sciences for students for future benefit - Keeping pace with scientific development - The student knows the basic principle of genetics
5. Available Attendance Forms:
Attendance in classrooms
6. Number of Credit Hours (Total) / Number of Units (Total)
30 theoretical/2
7. Course administrator's name (mention all, if more than one name)
Name: Assist. Prof. Dr. Omar Ismail Hazem aq.omar.hazym@uoanbar.edu.iq Email: Assisi. Prof. Dr. Hadeel Abdelelah Abdel Razaaq sc.hadeel_aldaraji@uoanbar.edu.iq
8. Course Objectives

Course Objectives	**• Adding new sciences for students f future benefit • Keeping pace with scientific development • The student knows the basic principle of genetics •**

9. Teaching and Learning Strategies

Strategy	**Student activities Legends Daily exams Reports Discussions during the lecture**

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	2	Adding a new scientific aspect + cognitive objectiv	Genetics	**Theoretical demonstrat**	Daily exams
2	2	Adding a new scientific aspect + cognitive objectiv	Genetic Mendelian	Theoretical + demonstration	Daily exams
3	2	Adding a new scientific aspect + cognitive objectives	Genetic Mendelian	Theoretical + demonstration	Daily exams
4	2	Adding a new scientific aspect + cognitive objectiv	Deviations from Mendel's first law	Theoretical + demonstration	Daily exams
5	2	Adding a new scientific aspect + cognitive objectiv	Penetrance & expressivity	Theoretical + demonstration	Daily exams
6	2	Adding a new scient aspect + cognitive objectiv	First month exam		
7	2	Adding a new scientific aspe + cognitive objectives	Epistasis	Theoretical + demonstration	Daily exams
8	2	Adding a new scientific aspect cognitive objectives	Epistasis	Theoretical + demonstration	Daily exams
9	2	Adding a new scientific aspe + cognitive objectives	Multiple alleles	Theoretical + demonstration	Daily exams
10	2	Adding a new scientific aspe + cognitive objectives	Multiple alleles	Theoretical + demonstration	Daily exams
11	2	Adding a new scientific aspect + cognitive objectives	Quantitative traits	Theoretical + demonstration	Daily exams
12	2	Adding a new scientific aspe + cognitive objectives	Heritability	Theoretical + demonstration	Daily exams
13	2	Adding a new scientific aspe + cognitive objectives	Sex determination	Theoretical + demonstration	Daily exams
14	2	Adding a new scientific aspe + cognitive objectives	Sex limited traits	Theoretical + demonstration	Daily exams
15	2	Adding a new scientific aspe cognitive objectives	Second month exam		

11.Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc.

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Basics of genetics, introduction human genetics

Main references (source)	Jenna Smith, The Post-Genomic E Jenna Smith, The Post-Genomic Era
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Genetics 2
2. Course Code:
EWB3304
3. Semester / Year:
First Semester / 2025
4. Description Preparation Date:
− Adding new sciences for students for future benefit − Keeping pace with scientific development − The student knows the basic principle of genetics
5. Available Attendance Forms:
Attendance in classrooms
6. Number of Credit Hours (Total) / Number of Units (Total)
30 theoretical/2
7. Course administrator's name (mention all, if more than one name)
Name: Assist. Prof. Dr. Omar Ismail Hazem aq.omar.hazym@uoanbar.edu.iq Email: Assisi. Prof. Dr. Hadeel Abdelelah Abdel Razaaq sc.hadeel_aldaraji@uoanbar.edu.iq
8. Course Objectives

Course Objectives	**• Adding new sciences for students f future benefit • Keeping pace with scientific development • The student knows the basic principle of genetics •**

9. Teaching and Learning Strategies	
Strategy	**Student activities Legends Daily exams Reports Discussions during the lecture**

10. Course Structure

Week	H	Required Learning Outcomes	Unit or	Learning	Evaluation

	ours		subject name	method	method
the first the second the third the fourth Fifth VI Seventh Ninth The tenth eleventh twelveth Thirteenth fourteenth Fifteenth	4	Adding a new scientific aspect + cognitive objectiv Adding a new scientific aspect + cognitive objectiv Adding a new scientific aspect + cognitive objectives Adding a new scientific aspect + cognitive objectiv Adding a new scientific aspect + cognitive objectiv Adding a new scient aspect + cognitive objectiv Adding a new scientific aspe + cognitive objectives Adding a new scientific aspect cognitive objectives Adding a new scientific aspe + cognitive objectives Adding a new scientific aspe + cognitive objectives Adding a new scientific aspect + cognitive objectives Adding a new scientific aspe + cognitive objectives Adding a new scientific aspe + cognitive objectives Adding a new scientific aspe + cognitive objectives Adding a new scientific asp + cognitive objectives	Estimating the number of genes for quantitative traits Gender assignment Sex-related traits Linkage, crossing, and genetic maps Cytoplasmic inheritance First month exam Genetic mutations Chromosomal mutations Genetic structure, chromosomal and genetic mutations Genetic structure, chromosomal and genetic mutations Genes and heredity Evidence that DNA is the genetic material Stability of the amount of DNA in chromosomes The nature of nucleic acids Replication of deoxygenated genetic material Translation The importance of proteins in genetics	**Theoretical demonstrat** Theoretical + demonstration Theoretical + demonstration Theoretical + demonstration Theoretical + demonstration Theoretical + demonstration Theoretical + demonstration Theoretical + demonstration Theoretical + demonstration Theoretical + demonstration Theoretical + demonstration	Daily exams Daily exams Daily exams Daily exams Daily exams Daily exams Daily exams Daily exams Daily exams Daily exams

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily

preparation, daily oral, monthly, or written exams, reports,…etc.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Basics of genetics, introduction human genetics
Main references (source)	Jenna Smith, The Post-Genomic E Jenna Smith, The Post-Genomic Era
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Parasitology1
2. Course Code:
3. Semester / Year:
First course 2025-2024
4. Description Preparation Date:
2024/10/12
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
3/ 4
7. Course administrator's name (mention all, if more than one name)
Names: Thefaf abdullah ahmed , Ghadir Mahmmoud Nejim Al_Rubaie Duaa jameel helal Ban Hussein Ali Emails: **Edw.thefaf_abd@uoanbar.edu.iq** **ghadeer.najim@uoanbar.edu.iq** **duaajameel@uoanbar.edu.iq** **ban.hussien@uoanbar.edu.iq**
8. Course Objectives

Course Objectives	• **Knowledge of medical parasitology** • **Knowledge what protzoa** • **Their most important type** • **and their medical importance** **Knowledge of Protozoa.platyhelminthes**
9. Teaching and Learning Strategies	
Strategy	The lecture is explained and clarified by presenting it to the students on the screen and re-clarifying it practically, after which the student is tested through daily exams.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
First	4	Introduction of parasitology	Parasitology1	A theoretical and practical lecture	Daily exams and daily assignments
Second	4	Protozoa,sarcodina an Their species	=	=	=
Third	4	Class flagellates. Blood and tissue flagellates a their genera.	=	=	=
Fourth	4	Class flagellates. intestianal flagellates and their genera	=	=	=
Fifth	4	ciliophora	=	=	=
Sixth	2	First month exam	=	Practical and theoretical exam	=
Seventh	4	Class sporozoa. Blood and tissue sporozoaand their genera	=	A theoretical and practical lecture	=
Eighth	4	Class sporozoa. intestianal sporozoa and their genera	=	=	=
Ninth	4	Classification of platyhelminthes	=	=	=
Tenth	4	Liver fluks,fasciola ,heterephyes	=	=	=
Eleventh	2	second month exam	=	Practical and theoretical exam	=
Twelveth	4	intestinal fluke,fasciolpsis	=	=	=
Thirteenth	4	cestoda and their genera	=	A theoretical and practical lecture	

11. Course Evaluation

The grade is distributed out of 100 according to the theoretical exams: 20 marks, the practical exams: 10 marks, the daily exams: 5 marks, and the daily assignments: 5 marks. The final exam is 60 marks, divided into 15 practical marks and 40 theoretical marks.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	
Main references (source)	Book of parasitolgy
Recommended books and references (scientific journals, reports…)	
Electronic references, websites.	

Course Description

1. Course Name:
Animal Physiology
2. Course Code:
WEB3312
3. Semester / Year:
Semester (2024-2025)
4. Description Preparation Date:
1-9-2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Dr.Nedhal Ibrahim Lateff edw.nedhal_79@uoanbar.edu.iq Ghadeer Mahmood Najm ag.ghadeer.mahmood@uoanbar.edu.iq Nbaa Mutea Abid AL-Alh naba.mutia@uoanbar.edu.iq Nuha Hatem Khalif nuha.tatem@uoanbar.edu.iq Duaa jameel Hilal duaajameel@uoanbar.edu.iq Ghofran Taha Mahdi
8. Course Objectives It aims to introduce the student to physiology, its importance, the relationship of the body's organs to each other functionally, and how to maintain these functions in a homeostatic state without the influence of external and internal conditions. • Knowing some of the medical conditions that accompany organ dysfunction
9. Teaching and Learning Strategies

Strategy	• Presenting the lecture through a meeting using the blackboard or projector (data show)- dialogue - group discussion - investigation and exploration - problem solving - scientific research - practical

	application in the laboratory - brainstorming.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Circulation physiology1	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
2	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Circulation physiology2	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
3	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Circulation physiology3	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
4	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Respiratory physiology1	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
5	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Respiratory physiology2	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports

6	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Regulation of body fluid or homeostasis	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
7	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Physiology of kidney	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
8	4		First month exam		Theoretical tests Practical tests Reports
9	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Digestive physiology1	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical te Practical tests Reports
10	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Digestive physiology2	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
11	4	Explanation, lecture, and presentation of the material using the blackwhiteboard a projector. Conducting laboratory experiments, preparing reports, and discussing	Temperature regulation	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports

12	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	General energ metabolism	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
13	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Nervous physiology	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports
14	4		second month exam		Theoretical tests Practical tests Reports
15	4	Explanation, lecture, and presentation of the material using the whiteboard and projector. Conducting laboratory experiments, preparing reports, and discussing	Muscles physiology	Knowledge and understanding Ability to analyze Developing teaching skill solving problems Practical application skill	Theoretical tests Practical tests Reports

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,...etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Youssef Muhammad Arab, Sabah Nasser Al-Alouji, Farouk Naji Karmasha, Marwan Abdel Rahim Yas. Animal Physiology.1989
Main references (source)	Guyton and Hall Textbook of medical physiology / John E. Hall & Michael E Hall , 14 edition,2016
Recommended books and references (scientific journals, reports…)	Principle of anatomy and physiology / Derrickson, Bryan H., Tortora, Gerard j.2017 * Animal physiology .Richard W Hill, Gordon A.Wyse, Margaret Anderson . 2016
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
Plant Physiology
2. Course Code:
EWB3405
3. Semester / Year:
Season/ Fourth
4. Description Preparation Date:
2024-2025
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Lecturer Dr. Ali Hussein Ibraheem Al-Bayati Email: ag.alihussein@uoanbar.edu.iq Name: Lecturer Asmaa Abdulameer Bedan Email: asmaa.abdulameer@uoanbar.edu.iq
8. Course Objectives

Course Objectives	**The course aims to enable the student to iden and study some of the vital processes carried by plants.**

9. Teaching and Learning Strategies

Strategy	Providing clear, systematic lectures in easy language for the learner. Lectures are constantly updated. Asking direct questions to all students to find out the extent of their interaction and to get the rest to pay attention. Asking indirect questions about the topic to determine the extent of the understanding. Harnessing the information display device (Data show) to clarify different aspects of the topic. Provide and display illustrative images. Apply what the student learns during the theoretical lesson in a practica lesson as much as possible.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	**2Theoreti 2practical**	Knowledge	Introduction to the concept of plant physiology	Use the whiteboar and display screen	Daily exam and oral questions
2	**2Theoreti 2practical**	Knowledge	Colloidal solutions and pla water relations	Use the whiteboar and display screen	Daily exam and oral questions
3	**2Theoreti 2practical**	Knowledge	Diffusion of gases and liquids	Use the whiteboar and display screen	Daily exam and oral questions
4	**2Theoreti 2practical**	Knowledge	Osmotic potential and wate pressure	Use the whiteboar and display screen	Daily exam and oral questions

5	**2Theoreti 2practical**	Knowledge	Water absorption and transfer in plants	Use the whiteboar and display screen	Daily exam and oral questions
6	**2Theoreti 2practical**		First month exam		
7	**2Theoreti 2practical**	Knowledge	Transpiration and factors affecting it, mineral nutrition and passive and active absorption	Use the whiteboar and display screen	Daily exam and oral questions
8	**2Theoreti 2practical**	Knowledge	Photosynthesis and light reactions	Use the whiteboar and display screen	Daily exam and oral questions
9	**2Theoreti 2practical**	Knowledge	Dark reactions and factors affecting photosynthesis	Use the whiteboar and display screen	Daily exam and oral questions
10	**2Theoreti 2practical**	Knowledge	Breathing and its types	Use the whiteboar and display screen	Daily exam and oral questions
11	**2Theoreti 2practical**	Knowledge	Plant growth and formation	Use the whiteboar and display screen	Daily exam and oral questions
12	**2Theoreti 2practical**		Second month exam		
13	**2Theoreti 2practical**	Knowledge	Growth regulators Gibberellins and cytokinins	Use the whiteboar and display screen	Daily exam and oral questions
14	**2Theoreti 2practical**	Knowledge	Abscisic acid and ethylene	Use the whiteboar and display screen	Daily exam and oral questions
15	**2Theoreti 2practical**	Knowledge	Germination and seed viability	Use the whiteboar and display screen	Daily exam and oral questions

11.Course Evaluation

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks
Quest with final = 100 marks

12.Learning and Teaching Resources

Required textbooks (curricular books, if any)	Plant physiology, part one and t (translated). Translated by Dr. Edited by Ramadan a Dr. Hanaa Fadel
Main references (source)	The science of plant growth and formati Dr. Abdel Azim Muhammad.
Recommended books and references (scientific journals, reports…)	Lectures on theoretical and practical pl physiology Botany book, second section, pl physiology, Dr. Aboud Yasser Al-Qisha College of Science, Department of Biolo and Biotechnology
Electronic references, websites.	Use electronic references and websites

Course Description

1. Course Name:
MYCOLOGY
Course Code:
2.
EWB3309
3. Semester / Year:
Semester
4. Description Preparation Date:
2024
5. Available Attendance Forms:
Weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: Saja Yehia Abdouljaleel Hebatallah adel abdullah Estbrak Yahya Ashour Email: edw.saja76bio@uoanbar.edu.iq hebatallah85@uoanbar.edu.iq estbrak. Yahya@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• Detailed definition of the meaning of mycology for the student. • Introducing the student to the classification systems of fungi. • Introducing the student to the life cycles of fungi and the methods of reproduction available to them. • Study the most important diseases caused by fungi to plants in detail.

9. Teaching and Learning Strategies

Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student groups, 4- Practical lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	4	Define mycology	Fungi	Explanation model presentation slides - a lecture	Theoretic Tests Practical tests Reports

2	4	Introduction mycology	Fungi	Explanation model presentation slides - lecture	Theoretic Tests Practical tests Reports
3	4	Introduction mycology	Fungi	Explanation model presentation slides - lecture	Theoretic Tests Practical tests Reports
4	4	Study of components of fungal cell	Fungi	Explanation model presentation slides - lecture	Theoretical Tests Practical tests Reports
5	4	The basis for classification of fun	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports
6	4	tudy of oomycetes	Fungi	lanation - model presentation es - and lecture	Theoretical Tests Practical tests Reports
7	4	Study of dov mildew diseases	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports
8	4	The study Zygomycota	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports
9	4	The study Ascomycota	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports
10	4	Study of Discomyco	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports
11	4	Study Loculoascomycota	Fungi	Explanation model presentation slides - a	Theoretical Tests Practical tests Reports

				lecture	
12	4	dy of Basidiomycota	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports
13	4	tudy of Smith fungi	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports
14	4	Study of Rust fungi	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports
15	4	Study Deuttomycota	Fungi	Explanation model presentation slides - a lecture	Theoretical Tests Practical tests Reports

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,…etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Fundamentals of medical mycology Ahmed Sami Salman Faza . Introduction to mycology Abdul Aziz Majid Nakhilan . Fundamentals of mycology Abdul Aziz Majid Nakhilan
Main references (source)	Practical mycology Abdul Reda Taha Sarhan . Practical book on medicinal fungi Ibrahim Ali Al-Tayyar
Recommended books and references (scientific journals, reports…)	guest Lectures from other country or Univers internship , field studies
Electronic references, websites.	Use electronic references and websites

Course Description

1- Course Name: **Measurement and evaluation in the educational process**	
2- Course Code: : **Measurement and evaluation**	
3- Semester / Year:2024-2025	
4- Date this description was prepared: 13/2/2024	
5- Available attendance forms:my presence	
6- Number of study hours (total)\number of units (total):12 o'clock	
7- Name of the official judge (if more than one name is prohibited) **Dher.alani@uoanbar.edu.iq**	
8- Course objectives:	
Objectives of the study subject:	• * Covering tagets subigt ：Measurement and evaluation *Learn about ut the importance of measurement * Familiarity with some measurement and evaluation testng the meanings of vocabu ary, --dentify objective and achievement tests
9. Teaching and learning strategies	
The strategy	af almaerifiat :- an tariffs altaalibat eilm alarshad binaweih wan tuadih altaalibat ahimiat alarshad __ tubdi altaalibat rayha hawl alaikhtibarat alahdaf almaharatiat :- an tumaris altaalibat siaghat aliahdaf _ an tunaqish altaalibat mumayizat aliakhtibarat alahdaf alwijdaniat :- tatwir qudrat altaalib ealaa aleamal _ altafkir almantiqi u _ an yatahamas altaalib alaa akhudh dawr aldurus
10- Course structure	

Week	Hours	Required	Name of the unit or	Learning	Evaluation

		learning outcomes	topic	method	method
The First	2	In the ninth paragraph	Basic concepts in measurement and evaluation	Theoretical	Theoretical question and discussion
The Secon	2	In the ninth paragraph	Types of calendar	Theoretical	Theoretical question and discussion
The Third	2		Behavioral goals	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	Test map	Theoretical	Theoretical question and discussion
The fifth	2		the test 1	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	Types of achievement tests	Theoretical	Theoretical question and discussion
The sevent	2		Essay tests	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	Objective tests	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Performance tests	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Paragraph analysis	Theoretical	Theoretical question and discussion
The eleven	2	In the ninth paragraph	The ease and difficulty of essay paragraphs	Theoretical	Theoretical question and discussion
The twelve	2	In the ninth paragraph	Ease and difficulty of objective paragraphs	Theoretical	Theoretical question and discussion
The thirteer	2	In the ninth paragraph	Highlight essay paragraphs	Theoretical	Theoretical question and discussion
The fourtee	2	In the ninth paragraph	Highlight thematic paragraphs	Theoretical	Theoretical question and discussion
The fifteen	2	In the ninth paragraph	Test 2	Theoretical	Theoretical question and discussion

Course Description

1. Course Name:
Immunity
2. Course Code:
EWB3409
3. Semester / Year:
Semester
4. Description Preparation Date:
2024
5. Available Attendance Forms:
weekly
6. Number of Credit Hours (Total) / Number of Units (Total)
2 theoretical hours + 2 practical hours = (4 hours) per week Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: . Dr. Hanan Fawzi Salman & Dr. wafa talea Email: hanan .fawzi@uoanbar.edu.iq
8. Course Objectives

Course Objectives	• • Introducing students to the role of immune ce in resisting diseases • And learn about the mechanical mechanisms of work • As well as the importance of immunity in our da lives and how the body responds when a foreign body enters
9. Teaching and Learning Strategies	
Strategy	1- Explanation and clarification, 2- Lecture method, 3- Student groups, 4- Practical lessons in the laboratory and scientific trips, 5- Brainstorming

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method

1	4	Introduction to history of immunology	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
2	4	The lympha system and components	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
3	4	Acquired and inn immunity	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
4	4	Antibodies, their ty and functions	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
5	4	Antigens	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
6	4	First month exam	Immunity		Theoretical test Practical tests Reports
7	4	Immune receptors	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
8	4	Immune response	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
9	4	Complementary system	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
10	4	Serums, vaccines, and methods of manufacturing them	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
11	4	Inflammation a infection, their types a symptoms	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
12	4	Second month exam	Immunity		Theoretical test Practical tests Reports
13	4	Allergies	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports

14	4	Immunodeficiency diseases	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports
15	4	Autoimmune diseases	Immunity	Explanation a presentation of slide model a lecture	Theoretical test Practical tests Reports

11. Course Evaluation

Distributing the score out if 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports,...etc.

Monthly exams 25 marks
Daily preparation, daily exams and reports 5 marks
Practical exam: 10 marks
Strive 40 degrees
Final exam (45 marks for theoretical exam + 15 marks for practical exam) = 60 marks

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lippincotts Illlustrated Reviews- Richard Harf
Main references (source)	Basic science principles and immunological tes James Abdel Rahman Fundamentals of physic Mohamed Abdel Aziz
Recommended books and references (scientific journals, reports…)	Cellular and Molecular Immunology - Paul a Andrew H. Lichtman Practical immunobinding-binding immunoassays
Electronic references, websites.	Use electronic references and websites

Course Description

1- Course Name: Curricula and textbooks	
2- Course Code: :	
3- Semester / Year:2024-2025	
4- Date this description was prepared: 13/2/2024	
5- Available attendance forms:my presence	
6- Number of study hours (total)\number of units (total):30 o'clock	
7- Name of the official judge (if more than one name is prohibited) Walid Ahmed Abd	
8- Course objectives:	
Objectives of the study subject:	Understanding the concept of curriculum Comparing the old and modern curriculum • Curricula and their development
9. Teaching and learning strategies	Learning to Mastery Strategy Problem–Solving Method Inductive Method
The strategy	Cognitive objectives: Understanding thinking, its types and theories. Skill objectives: Thinking skills. Affective objectives: Developing the student's ability to work and think logically. Encouraging the student to take turns in lessons.
10- Course structure	

Week	Hours	Required	Name of the unit or	Learning	Evaluation

		learning outcomes	topic	method	method
The First	2	In the ninth paragraph	The concept of curriculum	Theoretical	Theoretical question and discussion
The Secon	2	In the ninth paragraph	The old concept of method and the modern concept	Theoretical	Theoretical question and discussion
The Third	2	-	Comparison between the modern and ancient concept of the curriculum	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	Curriculum elements	Theoretical	Theoretical question and discussion
The fifth	2		Curriculum development in secondary education	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	Curriculum construction and development	Theoretical	Theoretical question and discussion
The sevent	2		Curriculum evaluation	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	a test	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Curriculum evaluation forms	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	Curriculum evaluation	Theoretical	Theoretical question and discussion
The eleven	2	In the ninth paragraph	What is meant by curriculum evaluation?	Theoretical	Theoretical question and discussion
The twelve	2	In the ninth paragraph	The teacher and the curriculum	Theoretical	Theoretical question and discussion
The thirteer	2	In the ninth paragraph	Test	Theoretical	Theoretical question and discussion
The fourtee	2	In the ninth paragraph	Textbook analysis	Theoretical	Theoretical question and discussion
The fifteen	2	In the ninth paragraph		Theoretical	Theoretical question and discussion

Course Description

1- Course Name: Teaching methods
2- Course Code: :
3- Semester / Year:2024-2025
4- Date this description was prepared: 12/2/2024
5- Available attendance forms:my presence
6- Number of study hours (total)\number of units (total):14 o'clock
7- Name of the official judge (if more than one name is prohibited) //
8- Course objectives:

Objectives of the study subject:	•Trying to deliver the material in the easiest ways possible, and spreading the culture of e-learning (distance learning). - Understanding and clarifying the material according to the curriculum's vocabulary
9. Teaching and learning strategies	
The strategy	Using active and student-centered learning strategies to enable students to develop their potential effectively.
10- Course structure	

Week	Hours	Required learning outcomes	Name of the unit or topic	Learning method	Evaluation method
The First	2 ocloc Ck	In the ninth paragraph	Teaching and its foundations	Theoretical	Theoretical question and discussion

The Second	2	In the ninth paragraph	Learning and teaching	Theoretical	Theoretical question and discussion
The Third	2		Foundations of good teaching	Theoretical	Theoretical question and discussion
The fourth	2	In the ninth paragraph	Basic principles of teaching	Theoretical	Theoretical question and discussion
The fifth	2		Elements of the teaching process	Theoretical	Theoretical question and discussion
The sixte	2	In the ninth paragraph	Characteristics of a successful teacher	Theoretical	Theoretical question and discussion
The seventh	2		Pillars of the teaching process	Theoretical	Theoretical question and discussion
The eighth	2	In the ninth paragraph	Basic principles of teaching	Theoretical	Theoretical question and discussion
The ninte	2	In the ninth paragraph	The concept of teaching methods and their types	Theoretical	Theoretical question and discussion
Educatio Planning	2	-	The difference between the concepts of strategy, method and style	-	Theoretical question and discussion
Types of Educatio Planning	2	-	- Factors affecting teaching methods	-	Theoretical question and discussion
			Teaching, curriculum and method		Theoretical question and discussion
			Educational objectives		Theoretical question and discussion
					Theoretical question and discussion