

Program Catalogue 2026 – 2025



University of Basrah – College of Agriculture – Department of Plant Protection

Bachelor of Science in Agricultural Sciences (Plant Protection)

First Cycle



Academic Program Description Form

University Name **University Of Basrah**
Faculty / Institute **College Of Agriculture**
Scientific Department **Plant Protection**
Academic or Professional Program Name **Plant Protection**
Final Certificate Name **Bachelors in Plant Protection**
Academic System **Semester System**
Description Preparation Date 10 June 2026
File Completion Date 21 June 2026



Head of Department Name
Prof Dr. Alaa Hassan Radhi
Date 21 June 2026



Scientific Associate Name
Prof Dr. Sadiq Jabar Muhsin
21 June 2026



Signature

This File Is Checked by Prof Dr. Aqeel Abbood Suhaim
Department of Quality Assurance and University Performance
Director of The Department Of Quality Assurance and University Performance
Date 21 June 2026



Prof Dr Sarmad Ghazi Mohammed
Approval of The Dean

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1. **Mission & Vision Statement**

Vision Statement

The discipline of agricultural sciences, in particular plant protection, through a combination of course work, laboratory experiences, research, and fieldwork. The combination of instructional methods leads students to a balanced understanding of the scientific methods used by entomologists, mycologists, or agrochemicals, leading to the student's knowledge of pest identification and how to control them using a suitable method. Small class sizes within the plant protection program foster a close working relationship between academic staff and students in an informal and nurturing atmosphere.

Mission Statement

The Plant Protection academic staff pursues a multifaceted charge at the University of Basrah. The program seeks to provide all Plant Protection students with fundamental knowledge of plant disease, economic insects, medical and veterinary insects, mites, honey bees, and pesticides as a deeper understanding of a selected focus area within the agricultural sciences. The curriculum and advising have been designed to prepare graduates for their professional future, whether they choose to work as field entomologists, mycologists, or even agrochemicals specializing or to pursue advanced degrees in the life sciences or health sciences. The plant protection program also provides the necessary fundamental knowledge of the life sciences to support the engineers in the agriculture departments of the governorate. In addition, termite control courses or honey production are for not only those students seeking to complete the general education requirements but also for the interns.

2. **Program Specification**

Programme code:	BSc- Agricultural Sciences, Plant Protection	ECTS	240
Duration:	4 levels, 8 Semesters	Method of Attendance:	Full Time

Plant protection is a wonderfully wide-ranging subject and is well equipped to deliver. The emphasis of the program is the whole organism (pathogens), insects that attack plants, and the chemicals that are used to protect the plants from different harmful pests. All of these subjects are related in an agricultural ecosystem. The degree is popular; it's the breadth of the subject that appeals; for others, it is a path to specialization. All students have the opportunity to transfer onto our specialist degrees in Entomology and some basic sciences at the end of the first year.

Level 1 exposes students to the fundamentals of plant protection, suitable for progression to all programs within the plant protection program group. Programme-specific core topics are covered at Level 2, preparing for research-led subject specialist modules at Levels 3 and 4. The university plant protection graduate is therefore trained to appreciate how research informs teaching, according to the university and school mission statements.

At Levels 2, students are studying many modules that are more specialized. These subjects start to prepare the students to be more interested in the plant protection. This allows students to develop their own wide-ranging interests in plant protection.

At levels 3 and 4, the students will gain all the module credits that enable them to be agricultural engineers holding plant protection skills.

The research ethos is developed and fostered from the start via practical, which are either embedded in lecture modules or taught in dedicated practical modules, research seminars, and tutorials. There is a compulsory field course in Level 1, which students must pass in order to progress into Level 2, and optional field courses in Levels 2, 3, and 4. At Level 4, all students carry out an independent research project, a data analysis project, or a credit field or laboratory-based project.

3. Program Objectives

1. To provide a comprehensive education in biology that stresses scientific reasoning and problem solving across the spectrum of disciplines within biology
2. To prepare students for a wide variety of post-baccalaureate paths, including graduate school, professional training programs, or entry level jobs in any area of biology
3. To provide extensive hands-on training in electronic technology, statistical analysis, laboratory skills, and field techniques
4. To provide thorough training in written and oral communication of scientific information
5. To enrich students with opportunities for alternative education in the area of biology through undergraduate research, internships, and study-abroad

4. Student Learning Outcomes

Plant Protection is the study of the relationship between plant and different pests; breeding and production of honeybees and termite control. Graduates obtain information on the identification of pests either morphological or molecular and utilize basic knowledge toward realizing broader concepts. The Department offers a Bachelor of Agricultural Sciences in Plant protection with a concentration in General plant-pests relationship; additionally, the Department offers courses to a large number of students from other departments and supports pre-professional programs. The plant protection curriculum and experiences are designed to prepare students, for entry into graduate studies, agricultural careers and education

Outcome 1

Identification of Complex Relationships

Graduates will be able to illustrate the plant, soil, and insect structure, function of cellular components, and explain how they interact in a living cell.

Outcome 2

Oral and Written Communication

Graduates will be able to formally communicate the results of plant protection investigations using both oral and written communication skills.

Outcome 3

Laboratory and Field Studies

Graduates will be able to perform laboratory experiments and field studies, by using scientific equipment and computer technology while observing appropriate safety protocols.

Outcome 4

Scientific Knowledge

Graduates will be able to demonstrate a balanced concept of how scientific knowledge develops, including the historical development of pest control, pesticides, and the tools and equipment used.

Outcome 5

Data Analyses

Graduates will be able to demonstrate scientific quantitative skills, such as the ability to conduct data analysis using different statistical software, involving SPSS and GeneStat.

Outcome 6

Critical Thinking

Graduates will be able to use critical-thinking and problem-solving skills to develop a research project and/or paper.

5. Academic Staff

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6. Credits, Grading and GPA

Credits

The University of Basrah is following the Bologna Process with the European Credit Transfer System (ECTS) credit system. The total degree program number of ECTS is 240, 30 ECTS per semester. 1 ECTS is equivalent to 25 hours of student workload, including structured and unstructured workload.

Grading

Before the evaluation, the results are divided into two subgroups: pass and fail. Therefore, the results are independent of the students who failed a course. The grading system is defined as follows:

GRADING SCHEME مخطط الدرجات				
Group	Grade	التقدير	Marks (%)	Definition
Success Group	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors

(50 - 100)	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب - قيد المعالجة	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note:				
Number Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

Calculation of the Cumulative Grade Point Average (CGPA)

- The CGPA is calculated by the summation of each module score multiplied by its ECTS, all are divided by the program total ECTS.

CGPA of a 4-year B.Sc. degree:

$$\text{CGPA} = [(1^{\text{st}} \text{ module score} \times \text{ECTS}) + (2^{\text{nd}} \text{ module score} \times \text{ECTS}) + \dots] / 240$$

7. Curriculum/Modules

Semester 1 | 30 ECTS | 1 ECTS = 25 hrs.

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
DEHR105	Democracy and Human Rights	32	18	2		
ENTO113	Entomology	78	97	7		
ANPR 123	Animal Production	78	97	7		
ZOOL126	Zoology	78	97	7		
MATH194	Mathematics	78	47	5		
UOB 102	English language	32	18	2		

Semester 2 | 30 ECTS | 1 ECTS = 25 hrs.

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request
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UOB101	Arabic language	32	18	2		
ORCH125	Organic chemistry	78	72	6		
SOIL114	Soil Science	78	97	7		
FIC115	Field Crops	78	97	7		
UOB103	Computer	48	27	3		
AGEC129	Agricultural Economy	32	78	5		

Semester 3 | 30 ECTS | 1 ECTS = 25 hrs.

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request

Semester 4 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request

Semester 5 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request

Semester 6 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request

Semester 7 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request

Semester 8 | 30 ECTS | 1 ECTS = 25 hrs

Code	Module	SSWL	USSWL	ECTS	Type	Pre-request

8. **Contact**

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University of Basrah



Second Cycle – Bachelor's Degree (B.Sc.) - Agricultural Sciences- Department of Plant Protection



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1. Overview

This catalogue is about the courses (modules) given by the program of plant protection to gain the Bachelor of Agricultural Sciences degree . The program delivers (xx) Modules with (6000) total student workload hours and 240 total ECTS. The module delivery is based on the Bologna Process.

2. Undergraduate Courses 2025-2026

Module 1

Code	Course/Module Title	ECTS	Semester
UOB102	English language	2	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2		32	18
Description			
This section includes a description of the module, 100-150 words			

Module 2

Code	Course/Module Title	ECTS	Semester
UOB104	Democracy and Human rights	2	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	0	32	18
Description			
This section includes a description of the module, 100-150 words			

Module 3

Code	Course/Module Title	ECTS	Semester
ANPR123	Animal Production	7	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)

2	3	78	97
Description			
This section includes a description of the module, 100-150 words			

Module 4

Code	Course/Module Title	ECTS	Semester
ENTO113	Entomology	7	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	78	97
Description			
This section includes a description of the module, 100-150 words			

Module 5

Code	Course/Module Title	ECTS	Semester
MATH111	Mathematics	5	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
3		32	18
Description			
This section includes a description of the module, 100-150 words			

Module 6

Code	Course/Module Title	ECTS	Semester
ZOOL126	Zoology	7	1
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	78	97
Description			
This section includes a description of the module, 100-150 words			

Module 7

Code	Course/Module Title	ECTS	Semester
ARAL104	Arabic language	2	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)

2		32	18
Description			
This section includes a description of the module, 100-150 words			

Module 8

Code	Course/Module Title	ECTS	Semester
OCHM197	Organic chemistry	6	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	78	72
Description			
This section includes a description of the module, 100-150 words			

Module 9

Code	Course/Module Title	ECTS	Semester
SOIL114	soil science	7	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	78	97
Description			
This section includes a description of the module, 100-150 words			

Module 10

Code	Course/Module Title	ECTS	Semester
FIC115	Field Crop	7	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	3	78	97
Description			
This section includes a description of the module, 100-150 words			

Module 11

Code	Course/Module Title	ECTS	Semester
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CPMP101	Computer Applications	3	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
1	2	48	27
Description			
This section includes a description of the module, 100-150 words			

Module 12

Code	Course/Module Title	ECTS	Semester
AGEC129	Agricultural Economy	5	2
Class (hr/w)	Lect/Lab./Prac./Tutor	SSWL (hr/sem)	USWL (hr/w)
2	0	32	78
Description			
This section includes a description of the module, 100-150 words			

Contact

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MODULES DESCRIPTION

وصف المواد الدراسية

قسم وقاية النبات

2025-2026

First – Year Students

طلبة المرحلة الاولى

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	English language		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	UOB102		
ECTS Credits	2		
SWL (hr/sem)	50		
Module Level	1	Semester of Delivery	One
Administering Department	Animal Production	College	Agriculture
Module Leader	Name	e-mail	E-mail
Module Leader's Acad. Title	Assist. Prof.	Module Leader's Qualification	Ph.D.
Module Tutor	Dr. Hassan Nima Habib	e-mail	hassan.nima@uobasrah.edu.iq
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	31/08/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None		Semester

Co-requisites module	None	Semester	
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Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1-The aim of this course is to provide English learners with integrated language skills such as reading, listening and writing resulting in a level of basic language knowledge. 2-This course will focus on grammar rules, basic word knowledge and usage, reading comprehension, reading out of the lesson, and Paragraph writing. 3- A student may be able to listen to native speakers and speak English Language. 4- A student may be able to write and have creativity in his writing.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1 - Uses expressions of Quantity in elementary level of English. 2- Constructs sentences in Present Perfect Tense, Simple Future Tense and Going to Future Tense both in an oral and written task. 3- Defines basic Modals and employ them in elementary level of communication and writing skills. 4- Translates sentences in elementary level from English to another language. 5- Interprets the texts written in elementary level of English.
Indicative Contents المحتويات الإرشادية	Language is a rule-governed behavior. It is defined as the comprehension and/or use of a spoken (i.e., listening and speaking), written (i.e., reading and writing), and/or other communication symbol system (e.g., American Sign Language). Spoken and written language are composed of receptive (i.e., listening and reading) and expressive (i.e., speaking and writing) components. Spoken language, written language, and their associated components (i.e., receptive and expressive) are each a synergistic system comprised of individual language domains (i.e., phonology, morphology, syntax, semantics, pragmatics) that form a dynamic integrative whole Phonology study of the speech sound (i.e., phoneme) system of a language, including the rules for combining and using phonemes. Morphology study of the rules that govern how morphemes, the minimal meaningful units of language, are used in a language. Syntax the rules that pertain to the ways in which words can be combined to form

	sentences in a language. Semantics the meaning of words and combinations of words in a language.
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Enable students to recognize: 1 - Enabling students to communicate effectively and appropriately in real-life situations. 2 - Enabling students to use the English language effectively for the purpose of study across the curriculum. 3 - Enabling students to develop and integrate the use of the four language skills: reading, listening, speaking and writing. 4 - Enabling students to develop interest in and learn about literature. 5- Enable students to review and reinforce the structure that has already been learned

Student Workload (SWL) الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	32	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	18	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	50		

Module Evaluation

تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Structure of English sentence
Week 2	Present simple tense.
Week 3	Past simple tense.
Week 4	Present and past continuous tenses
Week 5	Future tense
Week 6	Possessive Adjectives
Week 7	Pronoun personal
Week 8	Preposition.
Week 9	Intransitive and transitive verbs
Week 10	Adverbs forms

Week 11	Performative verbs
Week 12	Possessive
Week 13	The plural of nouns and A singular noun
Week 14	The adjectives
Week 15	EXAM

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Yule, G. (2015). Oxford practice grammar advanced. Oxford University Press. Alexander, L. G. (2019). Longman English grammar practice. Addison Wesley.-	Yes
Recommended Texts	Various university research and dissertations in the English language related to animal productio	
Websites	https://agendaweb.org/listening/dictations.html	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	Democracy and Human Rights	Module Delivery
Module Type	Basic	☒ Theory ☐ Lecture
Module Code	UOB104	
ECTS Credits	2	

SWL (hr/sem)	50		☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Level	1	Semester of Delivery	One	
Administering Department	Animal Production	College	Agriculture	
Module Leader	Name	e-mail	E-mail	
Module Leader's Acad. Title	Assist. Prof.	Module Leader's Qualification	M.SC.	
Module Tutor	Wedad Salim Mohammad Al-Neam	e-mail	E-mail widad.mohammad@uobasrah.edu.iq	
Peer Reviewer Name	Name	e-mail	E-mail	
Scientific Committee Approval Date	01/06/2023	Version Number	1.0	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	A. To teach students the fundamentals of human rights and human rights law. B. To familiarize students with human rights and the main issues and challenges they face. C. To define and understand concepts related to freedoms, including individual rights and personal liberties. D. To develop critical thinking skills regarding issues related to freedoms and individual rights.
Module Learning	1. The student should understand the concept of rights, their laws, and their

Outcomes مخرجات التعلم للمادة الدراسية	applications. 2. The student should know how to participate in disseminating and implementing rights through real-world action. 3. The student should be able to use rights as a means for peaceful coexistence among all members of society and all living beings. 4. The student should be able to share these rights with others. 5. The student should be able to analyze and define the concept of freedom and distinguish between different types of freedoms. 6. The student should be able to engage with issues of freedoms at the national and international levels and influence public opinion.
Indicative Contents المحتويات الإرشادية	Fundamental and Non-Fundamental Rights and Freedoms Civil Rights and Freedoms Political Rights Human Rights and International Humanitarian Law

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Participating in lesson preparation 2. Question and answer format in the classroom 3. Assignments 4. Reports

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem)	18	Unstructured SWL (h/w)	1

الحمل الدراسي غير المنتظم للطلاب خلال الفصل		الحمل الدراسي غير المنتظم للطلاب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	50		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Definition of rights
Week 2	Types of human rights
Week 3	Basic and non-basic rights
Week 4	Civil rights, political rights
Week 5	Economic, social and cultural rights

	Individual rights and collective rights
Week 6	The New Rights System Human Rights and International Humanitarian Law The relationship between human rights and international humanitarian law
Week 7	Exam
Week 8	What is the concept of freedoms: the term freedom and public liberties
Week 9	The evolution of the concept of public freedoms
Week 10	Forms and types of public freedoms
Week 11	The legal system of public freedoms
Week 12	Regulation of public freedoms by public authorities
Week 13	Guarantees of public freedoms
Week 14	Freedoms in modern political thought
Week 15	Final Exam.

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Diamond L. & M. F. Plattner, eds., (2009), Democracy. A Reader, Baltimore, Johns Hopkins University Press.	Yes
Recommended Texts	مفهوم الحريات العامة وحقوق الانسان، اطارها التاريخي والفكري والفلسفي، وضماناتها الأساسية	
Websites	http://ghrorg-learning.blogspot.com	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Animal Production		Module Delivery
Module Type	Core		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	ANPR123		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	One
Administering Department	Animal Production	College	Agriculture
Module Leader	Prof. Dr. Rabia Jaddoa Abbas	e-mail	E-mail : rabia.jaddoa@uobasrah.edu.iq
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor	Dr. Zainab Ali Kadem	e-mail	Email : zainab.kadem@uobasrah.edu.iq
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	29/08/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	Enables the student to gain knowledge: 1. The importance of the science of the principles of animal production, which deals in detail with the economic importance of livestock and types of global and local livestock, and their management and care. 2. Studying the types and importance of other farm animals such as buffaloes, sheep and goats, and their management and care.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Familiarity with general information about animal production and its economic and nutritional importance. 2. Discuss the factors affecting production efficiency and how to improve it. 3. Explain and clarify the obstacles facing livestock and ways to improve it. 4. Introducing students to livestock, their types, and how to care for them. 5. Introducing students to dual-purpose cattle and local and international sheep and goat breeds. 6. Defining how to establish and care for a flock of sheep and goats. 7. Defining the specifications of global and local buffalo and their different breeds. 8. We are introducing students to the importance of poultry projects and meat and egg production. 9. Providing an overview of Farm animals feed materials and the process for preparing balanced nutritional rations. 10. Explanation and clarification of health programs for animals, how to prevent diseases and ways to improve the health of animals and increase their productivity. 11. A detailed explanation of the importance of raising calves and heifers and providing the necessary needs for their rearing. 12. A detailed description of the reproductive system of cows and a statement of its importance in the reproductive process, and how to increase the reproductive efficiency of the animal and increase the birth rate. 13. Explain animal breeding and improvement programs and discuss the importance of breeding, selection, and exclusion of weak animals. 14. A detailed explanation of the importance of camels and the equine species and how to manage and care for them.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. 1. Disseminating the culture of livestock's nutritional and economic importance as a major source of agricultural wealth and having a major role in the Country's economy. 2. Following modern methods and techniques in animal management, milking operations, and large animal slaughterhouses.

	- Teaching students the role of successful management (human factor or the breeder himself) of small and large ruminant fields. - Spreading the culture of benefiting from animal by-products such as manure waste and animal waste, and benefiting from animals in work. - Identifying the types of farm animals and the most important projects related to their breeding. - Solving administrative problems in cattle, sheep, and goat breeding fields.
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	- Enabling students to think and analyze topics related to the intellectual framework of the Principles of Animal Production subject - Enabling students to think and analyze topics related to animal species and the most important projects related to their breeding. - Enabling students to think and analyze topics related to identifying administrative problems in animal fields and working to address them. - Enabling students to think and analyze to identify the role of management (the role of the human factor or the breeder himself) in the success of animal fields of various types.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	A general introduction to animal production and its importance.
Week 2	Factors affecting the production efficiency of farm animals.
Week 3	Obstacles facing animal production in Iraq and ways to improve them.
Week 4	Cattle classification - global dairy cows - management and care.
Week 5	Dual-purpose cows - Iraqi cows - International breeds of sheep and goats. First Exam.
Week 6	Establishing and managing a flock of sheep and goats.
Week 7	Buffalo - general characteristics of buffalo - physiological characteristics - breeds of buffalo.

Week 8	Poultry birds - the economic importance of poultry projects- the production of eggs and meat.
Week 9	Nutrition and feed- Preparing animal feed.
Week 10	Health care for agricultural animals. Second Exam.
Week 11	The importance of raising calves and heifers in cow fields.
Week 12	The physiology of reproduction and artificial insemination.
Week 13	Genetic improvement in poultry. Third Exam.
Week 14	Other agricultural animals - camels - their management and care.
Week 15	Other Farm Animals - Horses - Fish - Their Management and Care.
Week 16	End of Semester Exam.

Delivery Plan (Weekly Lab. Syllabus)

(Filed المنهاج الاسبوعي للمختبر (الحقل

	Material Covered
Week 1	Lab 1: Visit the animal field (cow and sheep fields).
Week 2	Lab 2: Joint field operations for cows and sheep.
Week 3	Lab 3: Milking cows, learning about the lactation system of cattle and the automatic milking device.
Week 4	Lab 4: Suckling young calves.
Week 5	Lab 5: Learning about animal records.
Week 6	Lab 6: Scientific trip to one of the livestock projects.
Week 7	Lab 7: Methods of collecting semen and artificial insemination.
Week 8	Lab 8: Feed materials and feed composition.
Week 9	Lab 9: Animal housing.
Week 10	Lab 10: Parasite control and treatment.

Learning and Teaching Resources

مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Principles of Animal Production, written by Dr. Muzaffar Nafie Al-Sayegh - Dr. Taha Jassem Al-Taha - Dr. Suhaib Saeed Alwan Al-Zubaidi (1987).	Yes
Recommended Texts	Basics of animal production, written by A. Dr.. Ahmed Suleiman Mahmoud and A. Dr.. Mahmoud Riyad Al Mahdi (2013).	No
Websites	https://nicehatchincubators.com/the-principles-of-poultry-husbandry/	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 - 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information

معلومات المادة الدراسية				
Module Title	Entomology		Module Delivery	
Module Type	Core		☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	ENTO113			
ECTS Credits	7			
SWL (hr/sem)	175			
Module Level	1	Semester of Delivery	1	
Administering Department	Type Dept. Code	College	Type College Code	
Module Leader	Faisal nasser		e-mail	Email: faisal.nasser@uobasrah.edu.iq
Module Leader's Acad. Title	Assistant Professor		Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)		e-mail	E-mail
Peer Reviewer Name	Name		e-mail	E-mail
Scientific Committee Approval Date	01/06/2023		Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None		Semester
Co-requisites module	None		Semester

Module Aims, Learning Outcomes and Indicative Contents
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أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	1. Introduce Fundamental Concepts: To provide a foundational understanding of entomology, including the biology, taxonomy, and ecological significance of insects. 2. Develop Identification Skills: To equip students with the skills necessary to identify and classify insects based on their physical and behavioral characteristics. 3. Explore Ecological Roles: To explore the roles that insects play in various ecosystems and their importance to biodiversity and human activities. 4. Foster Research Skills: To encourage critical thinking and research skills through practical investigations and data analysis related to insect biology and behavior.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	: 1. Understand Basic Insect Biology: Describe the general anatomy, physiology, and life cycles of insects, including the various orders and families. 2. Identify Insect Orders and Families: Demonstrate the ability to identify key insect orders and families using dichotomous keys and other classification tools. 3. Analyze Ecological Interactions: Explain the roles insects play in their environments, including their interactions with plants, other animals, and humans. 4. Apply Field and Laboratory Techniques: Use standard entomological methods to collect, preserve, and analyze insect specimens, and interpret data to make informed conclusions. 5. Communicate Findings Effectively: Present research findings clearly and accurately in both written and oral formats, demonstrating an understanding of entomological concepts and methodologies.
Indicative Contents المحتويات الإرشادية	• Introduction to Entomology • Definition and scope of entomology • Historical perspectives and key figures in the field • Insect Anatomy and Physiology • External morphology: head, thorax, abdomen, and appendages

	• Internal systems: digestive, respiratory, circulatory, and reproductive • Insect Taxonomy and Classification • Overview of insect orders (e.g., Coleoptera, Lepidoptera, Diptera) • Key characteristics used in identification • Use of dichotomous keys and other classification tools • Life Cycles and Development • Complete and incomplete metamorphosis • Developmental stages and their significance • Insect Ecology and Behavior • Roles in ecosystems (pollinators, decomposers, etc.) • Insect-plant interactions (e.g., pollination, herbivory)
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• Interactive Lectures: Use visual aids and live examples to illustrate concepts. • Hands-On Activities: Engage in specimen examination and insect collection projects to deepen understanding. • Field Trips: Organize visits to natural habitats and exhibits to observe insects in their environments. • Technology Integration: Utilize apps and online resources for interactive learning experiences. • Group Work: Conduct research projects and discussion groups to foster collaboration and critical thinking. • Gamification: Implement games and quizzes to make learning enjoyable. • Case Studies and Real-World Applications: Discuss pest management and conservation issues to highlight the relevance of entomology. • Cross-Disciplinary Connections: Relate entomology to broader biological concepts and other fields like art and literature.

	• Encourage Inquiry: Promote curiosity and self-directed exploration to engage students actively
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Student Workload (SWL)			
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	6
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	-Introduction to Entomology Importance of entomology in plant protection
Week 2	Insect Morphology Overview of insect body structure Key external features and their function 2 Insect Morphology Overview of insect body structure Key external features and their function
Week 3	-Head Appendages and Sensory Organs Structure and function of antennae and mouthparts
Week 4	Structure and function of antennae
Week 5	-Types of mouth parts in insects
Week 6	-Insect abdominal appendages
Week 7	Mid-term Exam
Week 8	A description of the wings and web machine
Week 9	Internal structure: Digestive system
Week 10	Internal structure: Respiratory system
Week 11	Internal structure: Nervous and sensory system
Week 12	Insect life cycle: Complete and incomplete metamorphosis
Week 13	Insect behavior: Mating and communication
Week 14	Insects in the Environment: Pollination and Decomposition
Week 15	final-term Exam
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المناهج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Introduction to Learn about the lab and the equipment in it
Week 2	Lab 2: Collecting and preserving insects
Week 3	Lab 3: Types of antennae in insects
Week 4	Lab 4: Types of mouth parts in insects
Week 5	Lab 5: Types of legs and their modifications
Week 6	Lab 6: Types of wings and venation
Week 7	Lab 7: Abdominal appendages

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	• "Introduction to Insect Biology and Diversity" - Richard E. White • "Insects: Their Natural History and Diversity" - Stephen A. Marshall •	no
Recommended Texts	<i>Insects: Their Natural History and Diversity</i> . Firefly Books, 2006	yes
Websites	• Encyclopedia of Life • BugGuide.net	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition

Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Mathematics		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	STAT124		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level	1	Semester of Delivery	One
Administering Department	Type Dept. Code	College	Type College Code
Module Leader	Name	e-mail	E-mail
Module Leader's Acad. Title		Module Leader's Qualification	
Module Tutor		e-mail	
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	1/09/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	- توضيح أهمية علم الإحصاء في مجال جمع البيانات والتعرف على الطرق تبويبها وتمثيلها. - الالمام العلمي بالرموز الإحصائية وطرق التمثيل البياني والنظريات ذات العلاقة بالإحصاء ومقاييسه. - التعرف على أهم التوزيعات الإحصائية ونظرية الاحتمالات. - التعرف على العلاقات المتعلقة بمتغيرين كمقاييس الارتباط والانحدار.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- يلم بالطرق الإحصائية الخاصة بالعمليات الزراعية وتنظيمها وعرضها وتحليلها.. 2- يلم بمقاييس التمرکز والتشتت ذات العلاقة بالإنتاج الزراعي. 3- سيكتسب الطالب المهارات لمعرفة منحى التوزيع الطبيعي والمنحنى القياسي
Indicative Contents المحتويات الإرشادية	تعريف الطلبة بالدالة. تعريف الطلبة بطرق إيجاد مجال الدوال. تعريف الطلبة بطرق إيجاد مدى الدوال. تعريف الطلبة بطرق إيجاد الغاية للدوال. شرح خواص الغاية وطرق إيجادها عند اللانهاية. تعريف الطلبة بطريقة رسم الدوال. تعريف الطلبة بطرق اشتقاق الدوال باستخدام التعريف وطرق الاشتقاق. شرح للطلبة طريقة إيجاد معادلة المماس للدوال شرح تعريف التكامل الغير محدد وخصائصه شرح طريقة حساب التكامل المحدد وخصائصه شرح وتعريف الطلبة بمشتقة وتكامل الدوال المثلثية وخواصها

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	الاستراتيجية الرئيسية التي سيتم اتباعها في تقديم هذه الوحدة هي تشجيع الطلاب على المشاركة في التمارين، وفي الوقت نفسه صقل وتوسيع مهارات التفكير النقدي لديهم. وسيتم تحقيق ذلك من خلال الفصول الدراسية والدروس التفاعلية وحل التمارين والنظر في أنواع التجارب البسيطة التي تنطوي على بعض أنشطة أخذ العينات وكيفية وصفها احصائيا وتحليلها التي تهم الطلاب.

Student Workload (SWL) الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا
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Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	48	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	77	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	5
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	125		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	3	12% (10)	3, 5 and 10	LO #1, #2 , # 3 and #4, #5
	Assignments	3	12% (15)	3, 6 and 12	LO #2, #3 and #4, #5
	Projects / Lab.				
	Report	1	12% (10)	13	LO #2, #3 and #4
Summative assessment	Midterm Exam	2hr	14% (15)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	الدالة

Week 2	مجال الدالة
Week 3	مدى الدالة
Week 4	غاية الدالة
Week 5	غاية الدالة عند اللانهاية محاضرة + امتحان
Week 6	رسم الدالة
Week 7	اشتقاق الدالة
Week 8	معادلة المماس للدالة
Week 9	التكامل الغير محدد
Week 10	التكامل المحدد
Week 11	الدوال المثلثية
Week 12	الدوال اللوغارتمية
Week 13	الدوال الاسية
Week 14	التكامل بالتعويض
Week 15	الامتحان الثاني

Week 16	
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Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Ayres, Frank and Mendelson, Elliott., (2012), Schaum's Outline of Calculus, 6th Edition. US: McGraw- Hill Thomas, Jr., Weir, Hass, (2014), Thomas's Calculus, 13th Edition. Pearson	Yes
Recommended Texts	ابحاث مختلفة عن الدوال والتكاملات	No
Websites	Mathway Algebra Problem Solver	

Grading Scheme

مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Zoology		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	ZOOL126		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	One
Administering Department	Animal production	College	Agriculture
Module Leader	Khalid Chillab Kridie Al-Salhie	e-mail	Khalid.chillab@uobasrah.edu.iq
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	1/9/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives	Zoology involves the study of the structure and function of animals, biodiversity and ecology of ecosystems, and conservation biology. This

أهداف المادة الدراسية	knowledge is essential in order to understand, protect and manage species, habitats and ecosystems. The course aims to provide students with a wide skillset, and covers both local and global terrestrial and aquatic zoological issues whilst encouraging both a theoretical and applied approach to the subject. This course offers great opportunities for students interested in environment and species management or in becoming part of the global scientific community.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks. 1. Learn the importance of studying zoology. 2. Learn about the characteristics of the animal kingdom. 3. Learn about the characteristics and components of animal cells. 4. Description of cell division and its types. 5. Learn the rules of scientific nomenclature. 6. Discuss the physical and chemical nature of protoplasm. 7. Learn about the characteristics of animal phylums.
Indicative Contents المحتويات الإرشادية	This course is an introduction to the scientific study of animals. Students will explore the wonders of the animal kingdom through investigations of the physiology, reproduction, development, form and function of a wide diversity of both invertebrates and vertebrates. Students will learn through lectures and videos, practicals and independent study. This major will provide students with a sound knowledge and understanding of animal structure and function and the evolutionary processes that have engendered animal diversity. Zoologists also study physiology, reproduction, behaviour, community ecology and molecular genetics. Zoology underpins society's interest in conservation and marine science including major contributions to current research in ecosystem management.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	1- Enabling students to think and analyze topics related to the intellectual framework of the subject administration of zoology. 2- Enabling students to think and analyze topics related to measuring productivity. 3- Enabling students to think and analyze how to provide environmental conditions that affect animal phylums and their relationship to their production and health status
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Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative	Midterm Exam	2hr	10% (10)	7	LO #1 - #7

assessment	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Definition of zoology and its relationship to other sciences.
Week 2	The importance of studying zoology.
Week 3	Characteristics of the animal kingdom.
Week 4	Animal cell, its components and features.
Week 5	Cell division.
Week 6	Protoplasm and its chemical and physical properties.
Week 7	Mid-term Exam
Week 8	Classification and scientific nomenclature.
Week 9	Digestive, metabolism and absorption.
Week 10	Protozoa Phylum.
Week 11	Cnidaria or Coelenterata Phylum.
Week 12	Porifera (sponges) Phylum.
Week 13	Platyhelminthes Phylum.
Week 14	Aschelminthes Phylum.
Week 15	Annelide Phylum.
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus) المناهج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Microscope.
Week 2	Lab 2: Types of tissues.
Week 3	Lab 3: Practical application in protozoa phylum.
Week 4	Lab 4: Practical application in cnidaria phylum.
Week 5	Lab 5: Practical application in porifera phylum.
Week 6	Lab 6: Practical application in platyhelminthes phylum.
Week 7	Lab 7: Practical application in aschelminthes and annelide phylums.

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Zahir,E. and Najam, S.(1989). Zoology. Book.	Yes
Recommended Texts	Various classification research and university theses, zoology.	yes
Websites	1- https://www.britannica.com/science/zoology 2- https://www.sciencedirect.com/journal/zoology	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings

	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	Arabic language	Module Delivery

Module Type	Basic		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	UOB101			
ECTS Credits	2			
SWL (hr/sem)	50			
Module Level	1	Semester of Delivery	Two	
Administering Department	Animal production	College	Agriculture	
Module Leader	Name	e-mail	E-mail	
Module Leader's Acad. Title	Assist. Prof.	Module Leader's Qualification	M.Sc.	
Module Tutor	Wedad Salim Mohammad Al-Neam	e-mail	E-mail widad.mohammad@uobasrah.edu.iq	
Peer Reviewer Name	Name	e-mail	E-mail	
Scientific Committee Approval Date	01/06/2023	Version Number	1.0	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives	أهمية اللغة العربية للاختصاصات العلمية وميزتها بين اللغات الحية
أهداف المادة الدراسية	تجنب الأخطاء الشائعة وسلامة النطق

Module Learning Outcomes مخرجات التعلم للمادة الدراسية	أن يتعرف الطالب على قواعد اللغة العربية أن يعرف الطالب كيفية بناء الجمل واستخراجها للعنوان المطلوب.
Indicative Contents المحتويات الإرشادية	تدرس اللغة العربية على عدة مستويات: المستوى النحوي: وهو المستوى الذي من خلاله يمكن معرفة المعنى التركيبي للنص. المستوى الصرفي وهو المستوى الذي يمكن من خلاله معرفة المعنى المتفرع على المعنى المعجمي، المستوى الدلالي: وهو المستوى الذي من خلاله يمكن معرفة دلالة الألفاظ (الجذر). المستوى الصوتي: وهو المستوى الذي يدرس الحروف والحركات والمقاطع الصوتية سواء كانت لفظاً أو جزءاً من لفظ.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The main strategy that will be adopted in delivering this module are: 1. Power point presentation (Data show). 2. Explanation on the white board using different color markers. 3. Discussions with the student during teaching. 4. Interaction with students through daily problems practice through lecture. 5. Solve different problems with more exercises. 6. Submit assignment that develop student learning.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعاً			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعياً	2
Unstructured SWL (h/sem)	18	Unstructured SWL (h/w)	1

الحمل الدراسي غير المنتظم للطلاب خلال الفصل		الحمل الدراسي غير المنتظم للطلاب أسبوعيا	
Total SWL (h/sem)	50		
الحمل الدراسي الكلي للطلاب خلال الفصل			

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	أهمية اللغة العربية
Week 2	للاختصاصات
Week 3	العلمية، وميزتها بين
Week 4	اللغات الحية
Week 5	سورة الكهف أسباب

Week 6	تفسير عشرون آية مع
Week 7	الحفظ
Week 8	قواعد اللغة
Week 9	العربية/قواعد في
Week 10	الإعراب
Week 11	المبتدأ والخبر
Week 12	الأحرف المشبهة
Week 13	بالفعل
Week 14	الأفعال الناقصة
Week 15	المفاعيل

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	كتاب منهجي	Yes
Recommended Texts		
Websites		

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors

	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
(0 – 49)	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Computer		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	UOB103		
ECTS Credits	3		
SWL (hr/sem)	75		
Module Level	1	Semester of Delivery	Two
Administering Department	Animal Production	College	Agriculture
Module Leader	Adnan Jabbar Jaddoa Al-Kanaan	e-mail	E-mail: adnan.jaddoa@uobasrah.edu.iq
Module Leader's Acad. Title	Assoc. Prof.	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	31/08/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents
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أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Navigate the Windows 10 Interface: Efficient use of the Start Menu, Taskbar, and Desktop. 2. Manage Files Effectively: Organize, create, and maintain files using File Explorer. 3. Personalize System Settings: Customize display, user accounts, and notifications. 4. Ensure Network Connectivity and Security: Connect to networks, browse safely, and protect data. 5. Apply Security and Troubleshooting Skills: Use Windows Defender, Firewall, and troubleshoot common issues.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Identify the main components of the Windows 10 operating system: Understand the roles of the Start Menu, Taskbar, Desktop, and File Explorer. 2. Demonstrate the ability to perform basic file management tasks: Create, organize, rename, and delete files and folders effectively. 3. Customize Windows 10 settings: Adjust personalization options, including desktop backgrounds, themes, and user account configurations. 4. Connect to and manage network settings: Establish Wi-Fi and Ethernet connections and troubleshoot common connectivity issues. 5. Use Windows 10 security features: Implement basic security measures using Windows Defender, Firewall, and User Account Control (UAC). 6. Perform system maintenance tasks: Utilize Task Manager, Disk Cleanup, and System Restore to maintain system performance. 7. Navigate and use built-in Windows 10 applications: Operate applications such as Microsoft Edge, Mail, Calendar, and Photos. 8. Apply basic troubleshooting techniques: Identify and resolve common system and application problems. 9. Optimize system performance: Use virtual desktops, manage startup programs, and optimize settings for efficient operation. 10. Understand and apply basic internet safety practices: Recognize secure websites, avoid phishing attacks, and safely download files.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. Part A - Introduction to Computers and Hardware 1. Introduction to Computers ○ Definition and purpose of computers ○ History and evolution of computers ○ Types of computers (desktop, laptop, tablet, etc.) [SSWL = 6 hrs] 2. Computer Hardware Basics ○ Understanding computer hardware components ○ Overview of the CPU, motherboard, RAM, and storage devices ○ Introduction to input and output devices [SSWL = 6 hrs] 3. Inside the Computer ○ Detailed exploration of internal components ○ How different parts work together (CPU, RAM, hard drive)

- Basic troubleshooting and hardware maintenance
[SSWL = 6 hrs]

4. Peripheral Devices and Connectivity

- Common peripheral devices (mouse, keyboard, printer, etc.)
- Introduction to ports and connectors (USB, HDMI, etc.)
- How to set up and connect peripherals
[SSWL = 6 hrs]

Part B - Software and Operating Systems

5. Introduction to Software

- Difference between hardware and software
- Types of software (system software vs. application software)
- Overview of popular software applications
[SSWL = 6 hrs]

6. Introduction to Operating Systems

- Definition and role of operating systems
- Overview of popular operating systems (Windows, macOS, Linux)
- Basic functions of an operating system
[SSWL = 6 hrs]

7. Windows Operating System Overview

- History and evolution of Windows OS
- Comparison of different Windows versions
- Introduction to Windows 10 features
[SSWL = 6 hrs]

8. Installation and Setup of Windows 10

- System requirements for Windows 10
- Installation process step-by-step
- Initial setup and configuration
[SSWL = 6 hrs]

9. Navigating the Windows 10 Interface

- Understanding the Start Menu, Taskbar, and Desktop
- Customizing the desktop environment
- Using the search function effectively
[SSWL = 6 hrs]

Part C - Advanced Features and Maintenance

10. File Management in Windows 10

- Introduction to File Explorer
- Creating, organizing, and managing files and folders
- Understanding file types and extensions
[SSWL = 6 hrs]

12. Personalization and System Settings

- Customizing system settings and themes
- Managing user accounts and passwords
- Configuring display, sound, and notification settings
[SSWL = 6 hrs]

13. Networking and Internet Basics

	○ Connecting to Wi-Fi and Ethernet networks ○ Overview of internet browsers and search engines ○ Basic online safety and security practices [SSWL = 6 hrs] 14. Introduction to Virus Protection and Security ○ Understanding computer viruses and malware ○ Overview of antivirus software and firewall settings ○ Best practices for online security and data protection [SSWL = 6 hrs] 15. Troubleshooting and Maintenance ○ Common problems and troubleshooting tips ○ Using the Task Manager and Control Panel ○ Basic maintenance tasks (updates, backups, disk cleanup) [SSWL = 6 hrs] 16. Advanced Features and Tips in Windows 10 ○ Overview of Windows 10 productivity tools (Cortana, virtual desktops) ○ Using built-in applications (Microsoft Edge, Mail, Calendar) ○ Tips for optimizing system performance [SSWL = 6 hrs] 17. Revision and Preparatory Week for Final Exam ○ Review of key concepts and practical exercises ○ Practice exams and Q&A sessions [SSWL = 6 hrs] Total hours = 105 (SSWL - Self-Study and Lecture hours)
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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The learning strategy for this model is focused on encouraging students to become familiar with computer hardware components, operating systems, and essential software. This approach will provide participants with a solid scientific foundation in the field of computing, which they will be able to practically apply in their studies within the agricultural sciences field. This will be achieved through classes, interactive tutorials and by considering types of simple experiments involving some sampling activities that are interesting to the students.

Student Workload (SWL)			
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	48	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	27	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	2
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	75		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered

Week 1	Introduction to Computers • Definition and purpose of computers • History and evolution of computers • Types of computers (desktop, laptop, tablet, etc.)
Week 2	Computer Hardware Basics • Understanding computer hardware components • Overview of the CPU, motherboard, RAM, and storage devices • Introduction to input and output devices
Week 3	Inside the Computer • Detailed exploration of the internal components • How different parts work together (CPU, RAM, hard drive) • Basic troubleshooting and hardware maintenance
Week 4	Peripheral Devices and Connectivity • Common peripheral devices (mouse, keyboard, printer, etc.) • Introduction to ports and connectors (USB, HDMI, etc.) • How to set up and connect peripherals
Week 5	Introduction to Software • Difference between hardware and software • Types of software (system software vs. application software) • Overview of popular software applications
Week 6	Introduction to Operating Systems • Definition and role of operating systems • Overview of popular operating systems (Windows, macOS, Linux) • Basic functions of an operating system
Week 7	Windows Operating System Overview • History and evolution of Windows OS • Comparison of different Windows versions • Introduction to Windows 10 features
Week 8	Installation and Setup of Windows 10 • System requirements for Windows 10 • Installation process step-by-step • Initial setup and configuration
Week 9	Navigating the Windows 10 Interface • Understanding the Start Menu, Taskbar, and Desktop • Customizing the desktop environment • Using the search function effectively
Week 10	File Management in Windows 10 • Introduction to File Explorer • Creating, organizing, and managing files and folders • Understanding file types and extensions
Week 11	Personalization and System Settings • Customizing system settings and themes • Managing user accounts and passwords • Configuring display, sound, and notification settings

Week 12	Networking and Internet Basics - Connecting to Wi-Fi and Ethernet networks - Overview of internet browsers and search engines - Basic online safety and security practices
Week 13	Introduction to Virus Protection and Security - Understanding computer viruses and malware - Overview of antivirus software and firewall settings - Best practices for online security and data protection
Week 14	Troubleshooting and Maintenance - Common problems and troubleshooting tips - Using the Task Manager and Control Panel - Basic maintenance tasks (updates, backups, disk cleanup)
Week 15	Advanced Features and Tips in Windows 10 - Overview of Windows 10 productivity tools (Cortana, virtual desktops) - Using built-in applications (Microsoft Edge, Mail, Calendar) - Tips for optimizing system performance
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Introduction to Windows 10 Interface - Explore the Start Menu, Taskbar, and Desktop. - Practice opening, closing, and organizing windows. - Customize the Start Menu and Taskbar. - Use the search function to locate apps and settings.
Week 2	Basic File Management - Navigate File Explorer and its main components. - Create, rename, move, and delete files and folders. - Use keyboard shortcuts for file operations (copy, cut, paste, undo). - Understand file properties and extensions.
Week 3	Personalization and System Settings - Change desktop backgrounds, themes, and screen savers. - Configure Taskbar and notification area icons. - Manage user accounts (create, modify, delete). - Adjust basic system settings: display, sound, notifications.
Week 4	Networking and Internet Basics - Connect to Wi-Fi and Ethernet networks. - Troubleshoot common network connectivity issues. - Use Microsoft Edge for browsing, bookmarking, and managing history. - Learn basic internet safety and security tips.

Week 5	Security and Antivirus • Access and navigate Windows Security settings. • Use Windows Defender for scans and threat management. • Configure basic Windows Firewall settings. • Manage user account control (UAC) for added protection.
Week 6	Maintenance and Troubleshooting • Monitor system performance using Task Manager. • End unresponsive tasks and manage startup programs. • Perform basic system maintenance (Disk Cleanup, System Restore). • Explore Control Panel for advanced settings.
Week 7	Advanced Features and Optimization • Use virtual desktops for multitasking. • Introduction to Windows PowerShell commands. • Customize and use built-in Windows apps (e.g., Calendar, Mail). • Tips for optimizing system performance.

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	الربيعي، خالد عبد الوهاب. (2020) مدخل إلى علوم الحاسوب. بغداد: دار الثقافة والنشر حسن، علي عبد الله. (2016) مقدمة في الحاسوب ونظم التشغيل. بغداد: دار الجامعات العراقية.	Yes
Recommended Texts	• السامرائي، سعد عبد القادر. (2014) أساسيات الحاسوب ونظام التشغيل. بغداد: دار الكتب والوثائق. • الموسوي، محمد عبد الزهرة. (2018) نظم التشغيل والتحكم بالحاسوب. بغداد: دار الفكر.	No
Websites	https://www.rwaq.org https://academy.hsoub.com http://www.cprogramming.comebooks.com/12082-free-book	

Grading Scheme مخطط الدرجات
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Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Soil Principles		Module Delivery
Module Type	Core		☒ Theory ☒ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	SOIL114		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	1	Semester of Delivery	2
Administering Department	Plant protection	College	Agriculture
Module Leader	Mohsin Abdulhay Desher	e-mail	Mohsen.disher@uobasrah.edu.iq
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	03/09/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	Definition of soil, its components, and formation factors that are usually within the soil body, and the developments that occur in its body from the outside due to many factors such as: climate, topography, time, microbiology, and others. Physical properties such as (texture, structure, bulk and true density, color, temperature, etc.) and chemical properties such as (salinity, colloidal minerals, pH, etc.) and biological properties will also be studied.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Important: Write at least 6 Learning Outcomes, better to be equal to the number of study weeks. The properties of organic soil will also be studied and the extent of their impact on the physical and chemical properties of the soil, plant growth, and increased productivity, as well as soil classification, especially the soil of the southern region of Iraq, which includes studying the major and subgrade levels with the aim of classifying them according to climate, color, and the presence of organic matter in them, and thus explaining the use of any type of Soil for agricultural uses, whether plant, animal, etc.
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. A detailed theoretical explanation will be given to the subject chapters related to everything related to soil. Field visits to fields will also be conducted to identify soil types and take models from them, and thus conduct laboratory experiments on the collected soil models. There is also the possibility of visiting relevant departments. The semester includes daily and monthly exams and a request to prepare periodic reports on the subjects studied by the student.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	Type something like: The main strategy that will be adopted in delivering this module is to encourage students' participation in the exercises, while at the same time refining and expanding their critical thinking skills. This will be achieved through classes, interactive tutorials and by considering types of simple experiments involving some sampling activities that are interesting to the students.
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Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ أسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	6
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Defined of Soil and soil formation factors and operation
Week 2	Soil physics (Texture , structure , Soil color , Heatetc)
Week 3	Soil water content
Week 4	1 st examination
Week 5	Soil colludes and chemical properties
Week 6	Salinity and alkilne soil
Week 7	Reclamation soils effected by salinity
Week 8	Soil microbiology
Week 9	Organic matter in soil
Week 10	2 nd examination
Week 11	Soil classification
Week 12	Soil survey
Week 13	Minerals in soil
Week 14	Movement nutrition in soil and deficiency characteristics
Week 15	Preparatory week before the final Exam
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Taking soil samples and preparing them for analysis

Week 2	Lab 2: Methods for measuring soil moisture
Week 3	Lab 3: experiment measuring Soil texture
Week 4	Lab 4: experiment measuring Soil bulk density and soild density
Week 5	Lab 5: Exam
Week 6	Lab 6: preparation of extracts and measurement pH and Ec
Week 7	Lab 7: Estimation of carbonate and bicarbonate in soil
Week 8	Lab 8: Estimation of cations and ions in soil and water
Week 9	Lab 9:Organic matter determination by Walky & Black method
Week 10	Lab 10:Exam
Week 11	Lab 11: MeasuringThe Movement of water in the soil
Week 12	Lab 12: study microbiology in soil and Measuring bacteria number and fungi

Learning and Teaching Resources

مصادر التعلم والتدريس

	Text	Available in the Library?
Required Texts	Principles of soil science (1980) Najm abdullah Al-A Principles of soil science parctical 1988 Munther Majid and emad basher	Yes
Recommended Texts		No
Websites	Google	

Grading Scheme

مخطط الدرجات

Group	Grade	التقدير	Marks %	Definition
Success Group	A - Excellent	امتياز	90 - 100	Outstanding Performance

(50 - 100)	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	The agricultural economy		Module Delivery
Module Type	Core		☒ Theory ☒ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	AGEC129		
ECTS Credits	5		
SWL (hr/sem)	125		
Module Level	1	Semester of Delivery	2
Administering Department	Type Dept. Code	College	Type College Code
Module Leader	Khawla Rashige Hassan	e-mail	Khawla.hassan@uobasrah.edu.iq
Module Leader's Acad. Title	Assistant Prof.	Module Leader's Qualification	Ph.D.
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	2/09/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	Introducing the principles and basics of agricultural production economics and economic principles related to production, marketing, etc.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Agricultural economics contributes to providing students with the following knowledge: Introduction to agricultural economics and consumer behavior theory
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	The method of presentation is based on economic theories and laws, supported by exercises and examples, to understand the mechanism of their work in managing agricultural projects and developing income, whether at the level of the economic unit or the agricultural sector. The course management is based on student interaction through analysis and reasoning of the results of economic calculations of costs and other economic variables.
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Student Workload (SWL)

الحمل الدراسي للطلاب محسوب ل ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	32	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	78	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Introduction to economics and consumer behavior theory

Week 2	The role of agricultural activity in the national economy
Week 3	Economics of agricultural production
Week 4	Production costs
Week 5	Agricultural prices
Week 6	Markets and their types
Week 7	the first exam
Week 8	Farm management
Week 9	Agricultural development
Week 10	Agricultural marketing
Week 11	Agricultural finance
Week 12	International agricultural organizations and their role in supporting the agricultural sector

Week 13	Climate changes and their impact on the agricultural sector
Week 14	Agricultural tourism
Week 15	Evaluation and management of agricultural projects
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	الاقتصاد الزراعي/ د. عبد الوهاب مطر الداهري/وزارة التعليم العالي والبحث	Yes

	العلمي/1980	
Recommended Texts	مباديء الاقتصاد الزراعي/د.احمد أبو اليزيد	No
Websites	4readlib.com محمود سليم فور ريد - PDF كتاب الاقتصاد الزراعي	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Organic Chemistry		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	ORCH125		
ECTS Credits	6		
SWL (hr/sem)	150		
Module Level	1	Semester of Delivery	Two
Administering Department	Animal production	College	Agriculture college
Module Leader	Name	e-mail	E-mail
Module Leader's Acad. Title	Assist. Prof.	Module Leader's Qualification	M.Sc.
Module Tutor	Maryam Abdulbari Oraibi	e-mail	maria.ouraiby@uobasrah.edu.iq
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date	01/09/2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	The curriculum included a general study of the organic chemistry of some of its formulations, including aliphatic compounds, their preparation methods, their most important reactions and their naming, as well as aromatic compounds and their derivatives and their nomenclature, halogen organic compounds, oxygen organic compounds, nitrogen compounds, and stereochemistry.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	The organic chemistry curriculum is one of a series of important curricula in the Department of Food Sciences as a guide for students about the most important principles of organic chemistry, explaining the properties of chemicals and how to prepare them and reveal their presence to help know the dangers of these materials to humans and their environment and how to avoid these risks and to know the areas in which they can be used this Materials
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. Keeping abreast of the amazing developments taking place in various fields and sciences, especially organic chemistry, by clarifying the theoretical foundations and scientific and applied courses of the organic chemistry course through a detailed study of the composition, naming and preparation of chemicals and the chemical reactions explained by their mechanics.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	The modern teaching strategy includes achieving learning objectives in general and teaching chemical concepts in particular, and the difficulties that the student faces in understanding and acquiring the concepts of organic chemistry, and treating the difficulties by defining the concepts of organic chemistry and helping students acquire the correct chemical concepts.
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Student Workload (SWL)			
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	72	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	5
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	150		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	An overview of organic
Week 2	chemistry and the classes of
Week 3	organic chemistry
Week 4	Alkanes
Week 5	Alkenes
Week 6	Alkynes
Week 7	Exame
Week 8	Assignment 1
Week 9	aromatic hydrocarbons
Week 10	Alkyl and alcohol halides
Week 11	Phenols and ethers
Week 12	Aldehydes and ketones
Week 13	carboxylic acids
Week 14	Amines
Week 15	Exame
Week 16	

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Physical properties of organic materials
Week 2	Lab 2: Boiling Point Measurement
Week 3	Lab 3: Purification of organic matter and recrystallization
Week 4	Lab 4: solubility of organic compounds

Week 5	Lab 5: Effective totals
Week 6	Lab 6: Detecting the double bond
Week 7	Lab 7: Stereoisomers
Week8	Lab8: Detection of alcohols and phenols
Week9	Lab9: NS
Week10	Lab10: Detecting aldehydes and ketones and distinguishing between them
Week11	Lab11: Aspirin preparation
Week12	Lab12: Methane
Week13	Lab13: Physical properties of organic materials

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Osman, Ibrahim Mohamed (2005). Organic Chemistry: Concepts and Applications. Dar Al-Amal for Publishing and Distribution	NO
Recommended Texts	Mazahreh, Ayman Mokhtar (2017). Basics of organic chemistry and its applications. Curriculum House for Publishing and Distribution	No
Websites	NO	

[1]

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group	A - Excellent	امتياز	90 - 100	Outstanding Performance

(50 - 100)	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C – Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Field Crops		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☒ Practical ☐ Seminar
Module Code	FICR115		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level		Semester of Delivery	two
Administering Department	Animal production	College	Agriculture
Module Leader	Dr.Sabreen Hazim	e-mail	Sabreen.hazim@uobasrah.edu.iq
Module Leader's Acad. Title	Asst.Professor	Module Leader's Qualification	Ph.D.
Module Tutor	Dr.sabreen Hazim	e-mail	Sabreen.hazim@uobasrah.edu.iq
Peer Reviewer Name		e-mail	
Scientific Committee Approval Date	9-2-2024	Version Number	1.0

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	It is related to the subject of plant classification, field crop management, grain and legume crops, and other study subjects such as plant physiology and others.	Semester	
Co-requisites module	It is related to industrial crops, oil and sugar crops, fiber crops, as well as environmental science and soil basics.	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1. Knowing the basics of field crop management 2. Definition of field crop science, its economic importance, field crops, the most important divisions of field crops, and the effect of environmental conditions on crop growth. Important agricultural processes in crop production are also defined.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Identify the concept of field crops and how to manage the field. Understand and comprehend the theoretical material and apply it in the practical lesson to prepare students who are able to obtain new job opportunities. 2- Prepare students who have the ability to continue learning and developing inside and outside Iraq. 3- Prepare scientific researchers in the field of field crops who have the ability to provide advice, guidance and modern information in the field of the agricultural sector.
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The course includes (2) theoretical hours and (3) practical hours - the number of weekly hours is approved and distributed over 15 weeks. The strategy includes - The ability to work in the agricultural sector in the field crops specialization. - Encouraging students to excel academically to obtain new job opportunities. - Graduating students who have the ability to continue learning and developing inside and outside Iraq. - Preparing scientific researchers in the field of field crops. - Providing advice and up-to-date information to relevant institutions and ministries

Student Workload (SWL)			
الحمل الدراسي للطلاب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطلاب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطلاب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	7
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)
المنهاج الاسبوعي النظري

	Material Covered
Week 1	The concept of field crops science - divisions of field crops - scientific nomenclature
Week 2	Soil service operations - 1 - plowing - benefits of plowing - machines used in the plowing process
Week 3	Soil Service Operations 2- Smoothing 3- Leveling 4- Laser Leveling- Advantages of Land Amendment
Week 4	operations - methods of cultivation - A - method of cultivation according to the method of placing seeds in the soil (in terms of performance). B - The method of cultivation according to the moisture content of the soil when sowing. C - The method of cultivation according to the irrigation system. Advantages and disadvantages of each method
Week 5	Crop service operations - hoeing 3- grafting - grafting - planting depth - planting distances
Week 6	Germination of field crop seeds - factors affecting germination - types of germination Calculate the percentage of germination
Week 7	Mid-term Exam +
Week 8	Conducting a laboratory experiment - Requirements and how to conduct germination tests - Writing a report
Week 9	Botanical description of cereal and leguminous crops - display models
Week 10	Botanical description of oil crops and sugar crops - display models
Week 11	A field visit to nearby crop fields to learn about plants
Week 12	(Irrigation and drainage) - Irrigation methods - General benefits for the construction of drains
Week 13	Fertilizers and fertilization - types of fertilizers - ways to add fertilizers
Week 14	Harvest - Early and Late Harvest Damage
Week 15	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus)

المنهاج الاسبوعي للمختبر

	Material Covered
Week 1	The concept of field crops science - divisions of field crops - scientific nomenclature
Week 2	Soil service operations - 1 - plowing - benefits of plowing - machines used in the plowing process
Week 3	Soil Service Operations 2- Smoothing 3- Leveling 4- Laser Leveling- Advantages of Land Amendment
Week 4	operations - methods of cultivation - A - method of cultivation according to the method of placing seeds in the soil (in terms of performance). B - The method of cultivation according to the moisture content of the soil when sowing. C - The method of cultivation according to the irrigation system. Advantages and disadvantages of each method
Week 5	Crop service operations - hoeing 3- grafting - grafting - planting depth - planting distances
Week 6	Germination of field crop seeds - factors affecting germination - types of germination Calculate the percentage of germination
Week 7	Conducting a laboratory experiment - Requirements and how to conduct germination tests - Writing a report

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Mohammad Amin Omid Nouri (1986). Principles of Field Crops. Ministry of Higher Education and Scientific Research. University of Basra. College of Agriculture.	Yes
Recommended Texts	Al-Ansari, Majeed Mohsen and others (1980). Principles of Field Crops. Ministry of Higher Education and Scientific Research. Al-Ansari, Majeed Mohsen (1982). Field Crop Production. Ministry of Higher Education and Scientific Research. College of Agriculture, University of Baghdad	yes

Websites	
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Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULES DESCRIPTION

وصف المواد الدراسية

قسم وقاية النبات

2025-2026

Second – Year Students

طلبة المرحلة الثانية

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	English Language ²		Module Delivery	
Module Type	Basic		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	UOB202			
ECTS Credits	2			
SWL (hr/sem)	50			
Module Level	2	Semester of Delivery	3	
Administering Department	Plant Protection	College	الزراعة	
Module Leader	Hazim Sabah Al-Hamadani		e-mail	Hazim.rahmah@uobasrah.edu.iq
Module Leader's Acad. Title	Lecturer	Module Leader's Qualification	PhD	
Module Tutor	Name (if available)		e-mail	E-mail
Peer Reviewer Name	Name		e-mail	E-mail
Scientific Committee Approval Date		Version Number		

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	1. Thinking and analysis skills that enable access to knowledge of English language. 2. Submission of external examinations by local / regional / international bodies 3. Obtaining the skills required for a postgraduate plan (postgraduate studies).
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Define and identify nouns in English sentences. 2. Classify nouns into their major categories. 3. Apply the correct use of articles (a, an, the). 4. Distinguish situations where articles are required or omitted. 5. Construct accurate sentences using nouns appropriately. 6. Identify and correct common grammatical errors related to nouns and articles.
Indicative Contents المحتويات الإرشادية	1. Introduction to English Nouns. 2. Types of Nouns (Common, Proper, Countable, Uncountable, Abstract). 3. Indefinite Articles (a, an). 4. Definite Article (the). 5. Uses of Articles. 6. Omission of Articles. 7. Proper Names and Geographical Names. 8. Practical Exercises and Applications.

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	- Interactive lectures. - Explanation with practical examples. - Classroom discussions. - Cooperative learning activities. - Grammar exercises and language tasks.
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	- Homework assignments and feedback. - Quizzes and continuous assessment.
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Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	18	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	50		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المناهج الاسبوعي النظري

	Material Covered
Week 1	Introduction to English Grammar and Parts of Speech
Week 2	Nouns: Definition and Types
Week 3	Countable and Uncountable Nouns
Week 4	Singular and Plural Nouns
Week 5	Articles: A, An, The
Week 6	Nouns and Articles: Practice and Applications
Week 7	First Monthly Exam
Week 8	Conjunctions: Definition and Types
Week 9	Prepositions: Definition and Classification
Week 10	Prepositions of Time, Place, and Movement
Week 11	Negation in English: Basic Rules
Week 12	Negation with Auxiliary and Modal Verbs
Week 13	Question Formation: WH-Questions
Week 14	Comprehensive Review and Final Assessment
Week 15	Final Exam.
Week 16	

Delivery Plan (Weekly Lab. Syllabus)

المناهج الاسبوعي للمختبر

	Material Covered
Week 1	
Week 2	

Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Murphy, R. English Grammar in Use. Cambridge University Press. Eastwood, J. Oxford Practice Grammar. Oxford University Press.	No
Recommended Texts	Swan, M. <i>Practical English Usage</i> . Oxford University Press. Azar, B.S. & Hagen, S.A. <i>Understanding and Using English Grammar</i> . Pearson Education. British Council LearnEnglish. Cambridge English Learning Resource	No
Websites	Various sources from the internet and website	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded

(0 – 49)	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Microbiology		Module Delivery	
Module Type	Basic		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	MICB218			
ECTS Credits	7			
SWL (hr/sem)	175			
Module Level	2	Semester of Delivery	3	
Administering Department	Plant Protection	College	Agriculture	
Module Leader	Najlaa Hussein Mohammed	E-mail	najlaa.mohammed@uobasrah.edu.iq	
Module Leader's Acad. Title		Module Leader's Qualification	PhD	
Module Tutor	Name (if available)	E-mail	E-mail	
Peer Reviewer Name	Name	E-mail	E-mail	
Scientific Committee Approval Date		Version Number		

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	1 -Introduce students to the importance of the subject and its implications for daily life and various sciences. 2- Explain the most important modern ideas and advances in modern science. 3- Explain the importance of the subject, especially regarding plant diseases.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	• Theoretical lectures in classrooms. • Presentations and video materials. • Group discussions. • Problem-based learning, inquiry and brainstorming. • Report and project-based learning.

Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered

Week 1	Microbiology: Definition - Aspects it includes - Benefits of microbiology
Week 2	Classification of microorganisms
Week 3	Completion of microbiology classification - Shapes and groupings of bacterial cells - Size of bacterial cell
Week 4	Cellular structure of bacterial cells - Basic components of a bacterial cell - Non-essential components of a bacterial cell
Week 5	The effect of environmental factors on bacterial growth: temperature, humidity, and pH. Bacterial growth curve
Week 6	Genera that are Phytopathogenic bacteria - The most important symptoms they cause - The most important pathogenic to plants.
Week 7	First exam
Week 8	Plant-pathogenic viruses, their genera, and the most important symptoms they cause.
Week 9	Bacteriophages
Week 10	Eukaryotes and some protists and fungi
Week 11	Economic importance of fungi
Week 12	Classification of the Kingdom of Fungi
Week 13	The most important plant-pathogenic fungi
Week 14	Second exam
Week 15	General review
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	General guidelines and conditions that must be met and observed in the microbiology laboratory

Week 2	Culture media used in microbial isolation and sterilization methods
Week 3	Bacterial cell staining
Week 4	Staining of bacterial cell parts
Week 5	Methods of isolating and culturing microorganisms on pure
Week 6	Bacterial motility test
Week 7	Calculate the total number of bacteria

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Microbiology book	
Recommended Texts	Classification of the world of plants and microorganisms 2018	
Websites		

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Agricultural Extension		Module Delivery
Module Type	AGEX213		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	Basic		
ECTS Credits	2		
SWL (hr/sem)	50		
Module Level	2	Semester of Delivery	3
Administering Department	Plant Protection	College	Agriculture
Module Leader	Abdulameer Raheem Obaid	E-mail	abdulameer.obaid@uobasrah.edu.iq
Module Leader's Acad. Title		Module Leader's Qualification	
Module Tutor	Name (if available)	E-mail	E-mail
Peer Reviewer Name	Name	E-mail	E-mail
Scientific Committee Approval Date		Version Number	

Relation with other Modules

العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	• Learn about agricultural extension science • agricultural community and how to apply them
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies	
استراتيجيات التعلم والتعليم	
Strategies	The lesson includes (2) theoretical hours and (3) practical hours - the number of weekly hours approved distributed over 15 weeks.

Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	18	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	50		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Agricultural extension and its impact on the development of rural communities

Week 2	The role of agricultural extension in development and combating underdevelopment Agricultural extension – philosophy and objective
Week 3	Agricultural extension – philosophy and objective
Week 4	General principles of agricultural extension
Week 5	Exam1
Week 6	Agricultural extension activity and its development The different factors watch effect of Agricultural extension
Week 7	Agricultural Extension Systems and Organizations
Week 8	Types of Agricultural extension
Week 9	Characteristics of an agricultural guide
Week 10	Agricultural advisor qualifications
Week 11	Duties and duties of an agricultural guide
Week 12	Program planning and evaluation
Week 13	Principles of planning guidance programs
Week 14	Exam2
Week 15	
Week 16	

Delivery Plan (Weekly Lab. Syllabus)	
المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	

Week 5	
Week 6	
Week 7	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Agricultural extension, part 2 Dr . Abbas Abdul Mohsen	
Recommended Texts		
Websites		

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Plant Nutrition		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	PLNU426		
ECTS Credits	7		
SWL (hr/sem)	175		
Module Level	2	Semester of Delivery	3
Administering Department	Plant Protection	College	Agriculture
Module Leader	Rashad Adel Imran	e-mail	rashad.imran@uobasrah.edu.iq
Module Leader's Acad. Title	Prof.	Module Leader's Qualification	PhD
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date		Version Number	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	- Identify the importance of nutrients for plant growth and increasing its productivity. - Identify the physiological functions of each nutrient, the symptoms of its deficiency and how to treat it. - Studying the factors affecting the availability of nutrients.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	- Theoretical lectures in classrooms. - Presentations and video materials. - Group discussions. - Report and project-based learning

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	5

Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	175		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	The importance of plant nutrition and the division of nutrients.
Week 2	Plant nutrition media_ nutrition and plant growth_ The relationship of plant growth with time.
Week 3	Plant nutrition media_ nutrition and plant growth_ The relationship of plant growth with time.
Week 4	Theories of nutrients absorption by plants

Week 5	External and internal factors affecting plant growth. The role of hormones in the growth and development of grains.
Week 6	First exam
Week 7	Hypotheses to explain the relationship between root and stem growth.
Week 8	The relationship between the rate of nutrient absorption and ion concentration in solution. The importance of Michaelis constant and its derivation
Week 9	Mechanisms of bio-absorption of nutrients.
Week 10	Theories of ion crossing the plasma membrane.
Week 11	Selectivity of nutrient absorption.
Week 12	Water relations in plants. Mechanics of water movement within plants.
Week 13	Second examn.
Week 14	Nitrogen and sulfur
Week 15	immobilization in plant
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المناهج الاسبوعي للمختبر	
	Material Covered
Week 1	Preparing Nutrient Solutions
Week 2	Sand and Hydroponic Farming Experiment.
Week 3	Nutrient Deficiency Symptoms, Diagnosis, and Treatment- Nitrogen: Physiological functions, diagnosing deficiency symptoms, and treatment.
Week 4	Phosphorus: Physiological functions, diagnosing deficiency symptoms, and treatment.
Week 5	Potassium: Physiological functions, diagnosing deficiency symptoms , and treatment.
Week 6	Calcium and Magnesium: Physiological functions, diagnosing deficiency symptoms, and treatment.

Week 7	First monthly exam
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Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Practical Plant Nutrition. Yusuf Mohammed Abu Dahi. 1989. Ministry of Higher Education and Scientific Research. University of Basra. House of Wisdom.	
Recommended Texts	Plant Nutrition Guide, 1989. Yousef Mohammed Abu Dahi and Mu'ayyad Ahmed Al-Younis. Ministry of Higher Education and Scientific Research.	
Websites	Scientific articles published on the ResearchGate platform	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information			
معلومات المادة الدراسية			
Module Title	Baath Regime Crimes		Module Delivery
Module Type	Basic		☒ Theory ☐ Lecture ☐ Lab ☐ Tutorial ☐ Practical ☐ Seminar
Module Code	BACR205		
ECTS Credits	2		
SWL (hr/sem)	50		
Module Level	2	Semester of Delivery	
Administering Department	Plant Protection	College	Agriculture
Module Leader	Widad Salim Mohammad	e-mail	widad.mohammad@uobasrah.edu.iq
Module Leader's Acad. Title	Prof.	Module Leader's Qualification	PhD
Module Tutor	Name (if available)	e-mail	E-mail
Peer Reviewer Name	Name	e-mail	E-mail
Scientific Committee Approval Date		Version Number	

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents

أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية

Module Objectives أهداف المادة الدراسية	1- Talking about part of Iraq's contemporary history, the circumstances it went through, and the nature of the Baath regime that prevailed in that period in Iraq. 2- Highlighting the crimes of genocide and human rights violations committed against the Iraqi people.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies

استراتيجيات التعلم والتعليم

Strategies	• Theoretical lectures in classrooms. • Presentations and video materials. • Group discussions. • Problem-based learning, inquiry and brainstorming. • Report and project-based learning. • The lesson includes (2) hours of theory and (3) hours of practical - the number of weekly hours is approved, and distributed over 15 weeks.
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Student Workload (SWL)

الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	32	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	2
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Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطلاب خلال الفصل	18	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطلاب أسبوعيا	1
Total SWL (h/sem) الحمل الدراسي الكلي للطلاب خلال الفصل	50		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Crimes of the Baath regime according to the Iraqi Supreme Criminal Court Law in 2005
Week 2	The crimes of the Baath regime according to the documentation of the Law of the Supreme Iraqi Criminal Court in 2005
Week 3	Decisions issued by the Supreme Criminal Court
Week 4	Psychological and social crimes and their effects and the most prominent violations of the Baathist regime in Iraq

Week 5	The Baathist regime's position on religion
Week 6	Violations of Iraqi laws
Week 7	Exam
Week 8	Some decisions regarding political and military violations of the Baath regime
Week 9	Prison and detention places of the Baath regime
Week 10	Environmental crimes of the Baath regime in Iraq
Week 11	Military and radiation pollution, mines, and the destruction of cities and villages
Week 12	Drying the marshes and bulldozing palm orchards, trees and crops
Week 13	Mass grave crimes
Week 14	Chronological classification of genocide graves in Iraq for the period 1963-2003
Week 15	Exam
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	
Week 2	
Week 3	
Week 4	
Week 5	
Week 6	
Week 7	

Learning and Teaching Resources		
مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	The crimes of the Baath regime in Iraq	
Recommended Texts	The disintegration of the family and society in and from the Baath. Hussein Aliwi Al-Zayadi, Dr. Abbas Atiya Al-Quraishi, Environmental Crimes of the Baath Regime in Iraq, Iraqi Center for Documentation of Extremist Crimes, Holy Karbala, 2023.	
Websites	Some research and articles on genetics	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information				
معلومات المادة الدراسية				
Module Title	Computer Basics		Module Delivery	
Module Type	Basic		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	COMP201			
ECTS Credits	3			
SWL (hr/sem)	75			
Module Level	2	Semester of Delivery	4	
Administering Department	Plant Protection	College	Agriculture	
Module Leader	Mujtaba Abdel Wahab Tahir	e-mail	mujtaba.tahir@uobasrah.edu.iq	
Module Leader's Acad. Title	Prof.	Module Leader's Qualification	PhD	
Module Tutor	Name (if available)	e-mail	E-mail	
Peer Reviewer Name	Name	e-mail	E-mail	
Scientific Committee Approval Date		Version Number		

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents
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أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	• Training students on computer operation and practical identification of its physical components (Hardware and its various parts). • Enable students to use an operating system (such as Windows) to manage files and folders and perform basic tasks. • Teach students the skills of using word processing programs (Word), spreadsheets (Excel), and presentations (PowerPoint) in practice. • Training students to use the Internet and electronic communication tools in a safe and effective manner. • Teach students how to install basic software, maintain computers, and prevent viruses and electronic intrusions. • Develop students' skills in preparing reports and practical projects using the computer and its
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• The strategy of practical demonstration by providing a direct practical explanation of the basic skills, with an explanation of the steps of carrying out tasks on the computer in front of students inside the laboratory. • A self-learning strategy by encouraging students to explore programs and applications on their own, while providing educational resources and support. • Project learning strategy by assigning students to practical projects that require the use of various computer skills, such as preparing documents, spreadsheets, or presentations. • Guided discovery strategy by guiding students to discover new solutions and skills

	through guided questions and practical experiments within the laboratory.
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Student Workload (SWL)			
الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	48	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	27	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	75		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)

المناهج الاسبوعي النظري

	Material Covered
Week 1	Learn about computer components and operation
Week 2	Dealing with the operating system
Week 3	Word processing (Word)
Week 4	Spreadsheets (Excel)
Week 5	Presentations (PowerPoint)
Week 6	Simple drawing programs
Week 7	Mid-term Exam (Practical)
Week 8	Use of the Internet and Email
Week 9	Computer Security and File Protection
Week 10	Analyze data using Excel
Week 11	Data Management (Excel)
Week 12	Basic Computer Maintenance
Week 13	General review of practical skills
Week 14	Second monthly test (practical)
Week 15	Final exam (practical)
Week 16	

Delivery Plan (Weekly Lab. Syllabus)

المناهج الاسبوعي للمختبر

	Material Covered
Week 1	Understanding computer components and operation
Week 2	Working with the operating system

Week 3	Word processing
Week 4	Spreadsheets (Excel)
Week 5	PowerPoint
Week 6	Basic drawing programs
Week 7	Midterm exam (practical)

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Bahith, Al-Khidr Ali Al-Khidr (2020) Computer and Software Fundamentals . Al-Hajj , Ahmed Mohamed Ibrahim Mohamed, (2013) Learning Computer Basics, Noor Library	
Recommended Texts		
Websites	https://alison.com/tag/computer-skills	

Grading Scheme مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required

Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information						
معلومات المادة الدراسية						
Module Title	Medical and Veterinary Insects		Module Delivery			
Module Type	Basic		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar			
Module Code	MEIN243					
ECTS Credits	7					
SWL (hr/sem)	175					
Module Level	1	Semester of Delivery	One			
Administering Department	plant production	College	Agriculture			
Module Leader	Amjed Abbas Fadhil	e-mail	amjed.fadhil@uobasrah.edu.iq			
Module Leader's Acad. Title	Professor	Module Leader's Qualification	Ph.D.			
Module Tutor	Name (if available)	e-mail	E-mail			
Peer Reviewer Name	Name	e-mail	E-mail			
Scientific Committee Approval Date	1/9/2026	Version Number	1.0			

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	This course aims to enable students to understand and comprehend all aspects of medical and veterinary insects and their role in transmitting diseases to humans and domestic animals; to identify the most important methods of controlling medical insects; and to enable students to detect and identify the locations of medical insects.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Understanding medical entomology and the medical importance of these insects. 2. Identifying the most important factors affecting disease epidemiology. 3. Identifying the most important types of this order that transmit diseases. 4. Identifying the characteristics of houseflies and the most important diseases they transmit. 5. Identifying and distinguishing between types of mosquitoes and the most important diseases transmitted by each type. 6. Identifying types of myiasis, the most important insects that cause it, and the most important methods of prevention and control. 7. Distinguishing between types of mites that transmit pathogens.
Indicative Contents المحتويات الإرشادية	This course is an introduction to the scientific study of medical and veterinary entomology. Students will explore the most important insects that transmit diseases to humans and commercially important animals by studying their life cycles through videos, practical applications, and self-study. This specialization will provide students with a solid knowledge and understanding of the importance of these insects to public health, the most important symptoms of the diseases they transmit, and methods of prevention and control.

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Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1-Theoretical lectures in classrooms. 2-Presentations and video materials. 3-Group discussions. 4-Problem-based learning, inquiry-based learning, and brainstorming. 5-Report-based and project-based learning.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11

assessment	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Definition of medical entomology
Week 2	Epidemiology
Week 3	Order: Dictyoptera
Week 4	Order Hemiptera
Week 5	Order Diptera
Week 6	suborder : cyclorrapha
Week 7	Suborder: Nematocera
Week 8	First exam
Week 9	Suborder: Brachycera
Week 10	myiasis
Week 11	Bot
Week 12	Order: Mallophaga

Week 13	The medical significance of the mites / mites about mange in humans, mites about mange in goats, mites about mange in sheep
Week 14	tick
Week 15	Second exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Classify insects (the most important orders of medical importance)
Week 2	Order: Dictyoptera
Week 3	Order: Hemiptera
Week 4	Order: Diptera
Week 5	suborder: Cyclorhapha
Week 6	suborder: Nematocera
Week 7	suborder: Brachycera

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	Medical and Veterinary Entomology - Written by Dr. Salem Jameel	Yes
Recommended Texts	Veterinary Parasitology, authored by Dr. Ghazi Yaqoub Ghazal Al-Amara, Universit	yes

Websites	https://books-library.website/t-Insects-download-4
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Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information		
معلومات المادة الدراسية		
Module Title	Plant Physiology	Module Delivery
Module Type	Basic	☒ Theory
Module Code	PLPH220	☐ Lecture
ECTS Credits	7	☒ Lab

SWL (hr/sem)	175		☐ Tutorial ☐ Practical ☐ Seminar	
Module Level	2	Semester of Delivery	4	
Administering Department	Plant Protection	College	Agriculture	
Module Leader	Omar Amer Ibrahim	E-mail	omar.ibrahem@uobasrah.edu.iq	
Module Leader's Acad. Title	مدرس	Module Leader's Qualification	PhD	
Module Tutor	Name (if available)	E-mail	E-mail	
Peer Reviewer Name	Name	E-mail	E-mail	
Scientific Committee Approval Date		Version Number		

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module	None	Semester	
Co-requisites module	None	Semester	

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	• Introduction to Plant Physiology • Definition of Plant Physiology • Understanding Solutions and Colloidal Systems • General Characteristics of Water and Nutrient Transport • Introduction to Photosynthesis and Respiration
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• Define Plant Physiology and explain its importance and relationship to other agricultural sciences. • Explain the fundamental physiological processes occurring in plants. • Distinguish between different types of solutions and colloidal systems and describe their roles in plant cells. • Explain the mechanisms of water and nutrient transport within plants and the factors affecting these processes.

	- Describe the structure and functions of vascular tissues responsible for transport in plants. - Explain the process of photosynthesis and the factors influencing its efficiency. - Describe the process of respiration in plants and its role in energy production. - Compare photosynthesis and respiration in terms of inputs, outputs, and physiological significance. - Relate different physiological processes to plant growth, development, and productivity.
Indicative Contents المحتويات الإرشادية	- Introduction to Plant Physiology and its importance. - Solutions and colloidal systems in plant cells. - Absorption and transport of water and mineral nutrients in plants. - Photosynthesis and the factors affecting its efficiency. - Respiration and its relationship to plant growth and productivity.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	- Classroom-based theoretical lectures. - Presentations and educational video materials. - Group discussions and interactive learning activities. - Problem-based learning, inquiry, and brainstorming approaches. - Report writing and project-based learning.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	General introduction to solutions and their types.
Week 2	Properties of solutions: colloidal
Week 3	Diffusion and osmosis.
Week 4	Balsam
Week 5	Imbibition and transpiration
Week 6	Transpiration and absorption
Week 7	First month exam.
Week 8	Water absorption and transport

Week 9	Absorption and transport of nutrients.
Week 10	Chlorophyll and carotene
Week 11	Plastids.
Week 12	Light and dark interactions.
Week 13	Three- and four-carbon plants.
Week 14	Second month exam.
Week 15	Respiration in plants
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	A general idea about plant physiology
Week 2	Comparison between plant cell and animal cell
Week 3	The importance of water in plant life
Week 4	Exam.
Week 5	Solutions Spread Imbibition osmosis Feeling the plant
Week 6	Transpiration, Breathing, Photosynthesis
Week 7	Scientific trip

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	كتاب فسلجة النبات الجزء الثاني. (1987) تأليف عبد العظيم كاظم وعبد الهادي جواد الرئيس	Yes

	Plant Physiology, Part Two (1987). Abdul Azim Kazim and Abdul Hadi Jawad Al-Rayyes.	
Recommended Texts	كتاب فسلجة نبات مجلات علمية خاصة بالفسلجة	Yes
Websites	مواقع الانترنت	

Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
	F – Fail	راسب	(0-44)	Considerable amount of work required
Note: Marks Decimal places above or below 0.5 will be rounded to the higher or lower full mark (for example a mark of 54.5 will be rounded to 55, whereas a mark of 54.4 will be rounded to 54. The University has a policy NOT to condone "near-pass fails" so the only adjustment to marks awarded by the original marker(s) will be the automatic rounding outlined above.				

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information		
معلومات المادة الدراسية		
Module Title	Machines and Equipment	Module Delivery

Module Type	Basic		☒ Theory ☐ Lecture ☒ Lab ☐ Tutorial ☐ Practical ☐ Seminar	
Module Code	AGEQ232			
ECTS Credits	7			
SWL (hr/sem)	175			
Module Level	2	Semester of Delivery	4	
Administering Department	Plant Protection	College	Agriculture	
Module Leader	Majid Hazim Reshaq	e-mail	majid.reshaq@uobasrah.edu.iq	
Module Leader's Acad. Title	Prof.	Module Leader's Qualification	PhD	
Module Tutor	Name (if available)	e-mail	E-mail	
Peer Reviewer Name	Name	e-mail	E-mail	
Scientific Committee Approval Date		Version Number		

Relation with other Modules			
العلاقة مع المواد الدراسية الأخرى			
Prerequisite module		None	Semester
Co-requisites module		None	Semester

Module Aims, Learning Outcomes and Indicative Contents	
أهداف المادة الدراسية ونتائج التعلم والمحتويات الإرشادية	
Module Objectives أهداف المادة الدراسية	- Establishing the role of machinery and pest control equipment in agricultural fields to protect cultivated plants from various agricultural pests - Understanding the operation and calibration of pest control equipment in the laboratory and in the field - Knowledge of modern technologies in the field of pest control machinery and equipment and how to use them

Module Learning Outcomes	
مخرجات التعلم للمادة الدراسية	
Indicative Contents	
المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	• Theoretical lectures in classrooms. • Presentations and video materials. • Group discussions. • Problem-based learning, inquiry-based learning, and brainstorming. • Learning based on reports, projects, and live demonstrations of models related to pest control equipment.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	78	Structured SWL (h/w) الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	97	Unstructured SWL (h/w) الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	175		

Module Evaluation					
تقييم المادة الدراسية					
		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	Quizzes	2	10% (10)	5 and 10	LO #1, #2 and #10, #11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Lab.	1	10% (10)	Continuous	All
	Report	1	10% (10)	13	LO #5, #8 and #10
Summative assessment	Midterm Exam	2hr	10% (10)	7	LO #1 - #7
	Final Exam	3hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus)	
المنهاج الاسبوعي النظري	
	Material Covered
Week 1	General Introduction to Pests and Equipment
Week 2	Control Methods
Week 3	Mechanical Weeding
Week 4	Types of Control
Week 5	Physical Control
Week 6	Dusting Equipment
Week 7	Agricultural Spraying Equipment
Week 8	Hydraulic Spraying Equipment
Week 9	Air-Assisted Spraying Equipment

Week 10	Orchard Spraying Equipment
Week 11	Aerial Spraying Equipment
Week 12	Drones
Week 13	Mechanisms Used to Measure Droplet Sizes
Week 14	Control Efficiency
Week 15	Reducing the Environmental and Health Impacts of Pesticide Use
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المناهج الاسبوعي للمختبر	
	Material Covered
Week 1	Field observations of tractors and their types: moldboard plow, disc plow
Week 2	spirit and rotary plow, manure spreader, chemical fertilizer spreader
Week 3	fertilization equipment (oil and gas), seed drills and their systems
Week 4	sprinkler irrigation equipment, weed control equipment
Week 5	machines for mechanical thinning
Week 6	sprayers and dusters
Week 7	

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	Available in the Library?
Required Texts	معدات وقاية النبات	
Recommended Texts	معدات وقاية النبات + مصادر من الانترنت ISO. Equipment for crop protection	

Websites	
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Grading Scheme				
مخطط الدرجات				
Group	Grade	التقدير	Marks %	Definition
Success Group (50 - 100)	A - Excellent	امتياز	90 - 100	Outstanding Performance
	B - Very Good	جيد جدا	80 - 89	Above average with some errors
	C - Good	جيد	70 - 79	Sound work with notable errors
	D - Satisfactory	متوسط	60 - 69	Fair but with major shortcomings
	E - Sufficient	مقبول	50 - 59	Work meets minimum criteria
Fail Group (0 – 49)	FX – Fail	راسب (قيد المعالجة)	(45-49)	More work required but credit awarded
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