Ministry of Higher Education and Scientific Research
Scientific Supervision and Scientific Evaluation Apparatus
Directorate of Quality Assurance and Academic Accreditation
Accreditation Department

Academic Program and Course Description Guide

2025

Introduction:

The educational program is a well-planned set of courses that include procedures and experiences arranged in the form of an academic syllabus. Its main goal is to improve and build graduates' skills so they are ready for the job market. The program is reviewed and evaluated every year through internal or external audit procedures and programs like the External Examiner Program.

The academic program description is a short summary of the main features of the program and its courses. It shows what skills students are working to develop based on the program's goals. This description is very important because it is the main part of getting the program accredited, and it is written by the teaching staff together under the supervision of scientific committees in the scientific departments.

This guide, in its second version, includes a description of the academic program after updating the subjects and paragraphs of the previous guide in light of the updates and developments of the educational system in Iraq, which included the description of the academic program in its traditional form (annual, quarterly), as well as the adoption of the academic program description circulated according to the letter of the Department of Studies T 3/2906 on 3/5/2023 regarding the programs that adopt the Bologna Process as the basis for their work.

In this regard, we can only emphasize the importance of writing an academic programs and course description to ensure the proper functioning of the educational process.

Concepts and terminology:

Academic Program Description: The academic program description provides a brief summary of its vision, mission and objectives, including an accurate description of the targeted learning outcomes according to specific learning strategies.

Course Description: Provides a brief summary of the most important characteristics of the course and the learning outcomes expected of the students to achieve, proving whether they have made the most of the available learning opportunities. It is derived from the program description.

Program Vision: An ambitious picture for the future of the academic program to be sophisticated, inspiring, stimulating, realistic and applicable.

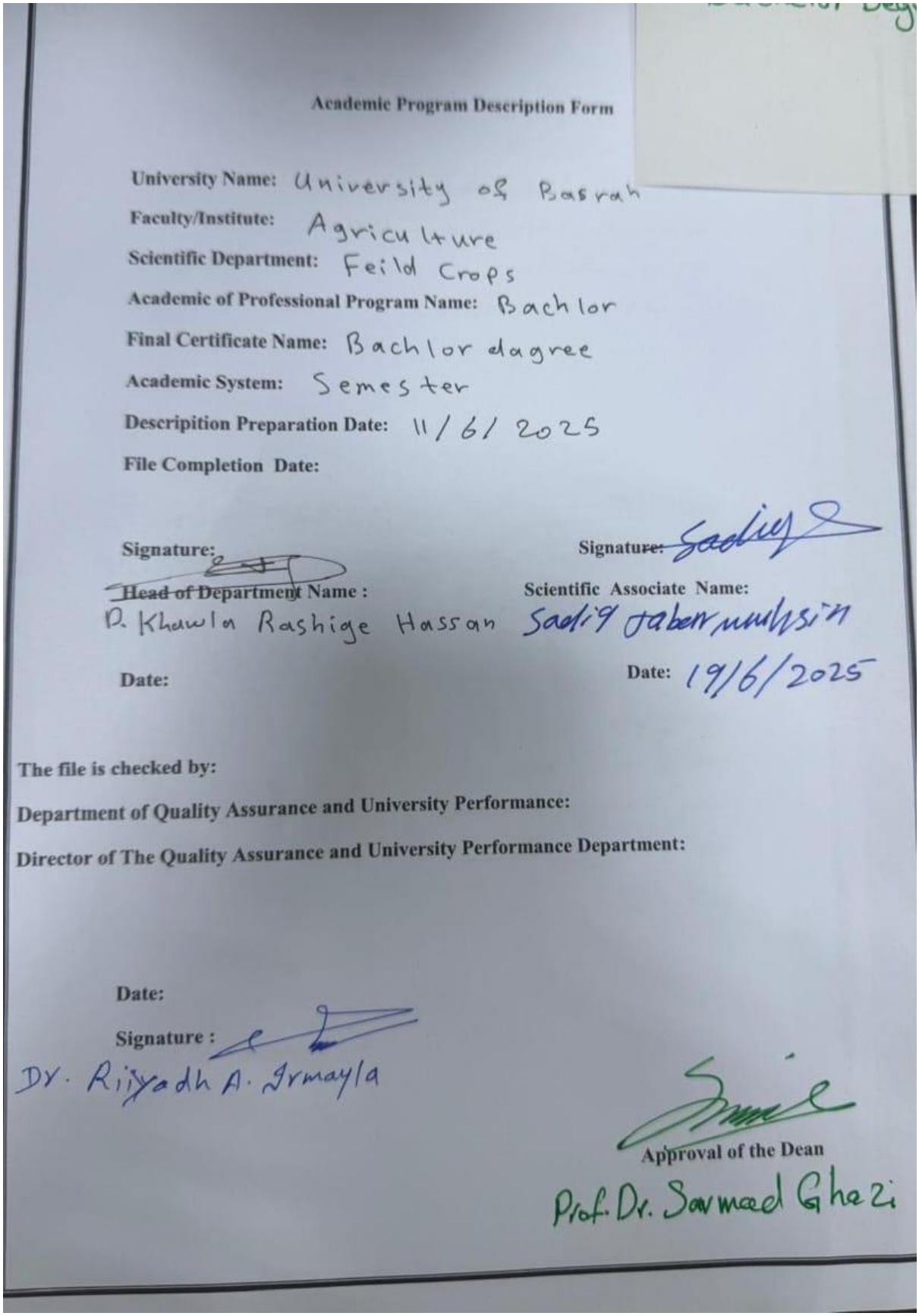
Program Mission: Briefly outlines the objectives and activities necessary to achieve them and defines the program's development paths and directions.

Program Objectives: They are statements that describe what the academic program intends to achieve within a specific period of time and are measurable and observable.

Curriculum Structure: All courses / subjects included in the academic program according to the approved learning system (quarterly, annual, Bologna Process) whether it is a requirement (ministry, university, college and scientific department) with the number of credit hours.

Learning Outcomes: A compatible set of knowledge, skills and values acquired by students after the successful completion of the academic program and must determine the learning outcomes of each course in a way that achieves the objectives of the program.

Teaching and learning strategies: They are the strategies used by the faculty members to develop students' teaching and learning, and they are plans that are followed to reach the learning goals. They describe all classroom and extra-curricular activities to achieve the learning outcomes of the program.



Academic Program Description Form

University Name: University of Basrah

Faculty/Institute: Agriculture

Scientific Department: Feild Crops

Academic of Professional Program Name: Bachlor

Final Certificate Name: Bachlor degree

Academic System: Semester

Descripition Preparation Date: 11/6/2025

File Completion Date:

Signature:

Head of Department Name : D. Khawla Rashige Hassan

Date:

Signature:

Scientific Associate Name: Sadiq Jaber muhsin

Date: 19/6/2025

The file is checked by:

Department of Quality Assurance and University Performance:

Director of The Quality Assurance and University Performance Department:

Date:

Signature :

Dr. Riyadh A. Irmayla

Approval of the Dean

Prof. Dr. Sarmad Ghazi

1. Program Vision

The Field Crops Department seeks to advance and excel, prepares the process of scientific and technical progress, and provides scientific and practical consultations for investment projects.

2. Program Mission
. Preparing qualified professors and agricultural engineers in the field of field crops who are up to date with the needs of the labor market and implementing the system of environmental preservation and community service by encouraging professors to .follow modern agricultural methods

3. Program Objectives
Improving the scientific level of the department, students and faculty **Providing a better teaching climate for students and teachers** **Providing appropriate opportunities to meet the department's need for scientific competencies** **Improvement and expansion in response to the labor market and community service**

4. Program Accreditation
Does the program have program accreditation? And from which agency? Seeks support

5. Other External Influences Ministry of Higher Education and Scientific Research
Is there a sponsor for the program? Opportunities for support are available

6. Program Structure

Program Structure	Number of Courses	Credit Hours	Percentage	Reviews*
Institution Requirements	8	16	50	
College Requirements	10	30	31.5	
Department Requirements	33	115.5	28	

Summer Training	-	-	**100**	
Others				

*

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

7. Program Description				
Year/Level	**Course Code**	**Course Name**	**Credit Hours**	
First stage First Semester	**ANCH121**	**Analytical Chemistry**	**3**	**2**
	MATH111	**Mathematics**	**-**	**3**
	FICR115	**Principles of Field Crops**	**3**	**2**
	UOB104	**Democracy and Human Rights**	**-**	**2**
	ANPR123	**Principles of animal production**	**3**	**2**
	UOB102	**English language1**	**-**	**2**
First stage Second Semester				
	AGEC129	**Agricultural Economy**	**3**	**2**
	ENDR117	**Engineering Drawing**	**3**	**-**
	COMP101	**Application of Computer /1**	**-**	**2**
	PLSU118	**Plane Survey**	**3**	**1**

	SOIL114	**Principles of soil**	**3**	**2**
	UOB101	**Arabic**		**2**

8. Expected Learning Outcomes of Program	
Knowledge	
Learning Outcomes **A- Cognitive objectives** **Knowing the theories related to different field .crops** **2-Understanding methods of growing field crops .and methods of field management** **3.Knowledge of scientific problem-solving skills** **4 - Enabling the student to understand the conversation about field crop sciences and equipping various relevant departments with specialized scientific cadres**	**Building a detailed base on the department's staff and their activities and preparing plans for accepting primary and postgraduate studies** **Preparing scientific and technical staff to occupy administrative and scientific positions in the Iraqi agricultural sector** **Training students to acquire applied agricultural experiences in addition to applied theoretical foundations**
Skills	
1.-Field crop technology and seed technology **2.-Technology of reclamation and soil preparation for agriculture** **3-Fertilization technology, crop service, combating weeds and agricultural pests, harvesting, animal production, and food .processing** **4- Irrigation and drainage engineering technology.**	**. Introducing students to the various agricultural operations in agriculture and how to conduct them** **Preparing agricultural cadres capable of caring for field crop plants, spreading their cultivation, and how to sustain the cultivated areas.** **Qualifying them to advance the crops that the**

Ethics	
1-Asking questions and answering them in the classroom 2-Defining the problem and its solution 3-Learn the correct ways of thinking 4- A case study in graduation research and how to solve it	Finding solutions to the problems and obstacles that students encounter in the theoretical and practical parts of the subject and finding solutions to them Enabling students to solve the largest number of exercises and applications on topics Asking students inferential questions

9. Teaching and Learning Strategies
-Lectures - Seminars Discussions

10. Evaluation Methods
Quarterly tests Monthly tests- Homework- - Graduation research discussion tests

11. Faculty			
Faculty Members			
Academic Rank	Specialization	Special Requirements/Skills (If Applicable)	Number of Teaching Staff

	General	Special			Staff	Lecturer
Prof	Soil and water sciences	plant nutrition			2	
Prof.	Horticulture and landscaping	plant nutrition			-	
Prof.	Field crops	Field Crop Physiology			1	
Assist.Prof.	Economic sciences	Economic development			1	
Assist.Prof.	Life science	plant physiology			2	
Assist.Prof.	Horticulture and landscaping	Production of vegetable crops			1	
Assist.Prof.	animal production	Animal feeding			1	
Assist.Prof.	Field crops	Plant Physiology			1	
Assist.Prof.	Field crops	plant breeding			1	
Assist.Prof.	Field crops	Ecology Physiology			2	
Assist.Prof	Soil and water sciences	Soil and water sciences			1	
lecturer	Field crops	Field crops			1	
Lecturer	Field crops	Field crops			5	
lecturer	Field crops	Field crops			1	
lecturer	Field crops	Field crops			-	
lecturer	Physics Science	Laser physics			-	
lecturer	Field crops	Field crops			-	

Ass. lecturer	**Field crops**	**Field crops**			**-**	
Ass. Lecturer	**Field crops**	**Field crops**			**3**	
Ass. Lecturer	**Field crops**	**Field crops**			**-**	

Professional Development
Monitoring New Faculty Members
Focus on developing personal capabilities through continuous and active participation in general and specialized courses and workshops **Focus on self-development in the field of classroom management and student guidance through mutual interaction in lectures**
Professional Development for Faculty Members
By following modern teaching methods, reviewing websites, and keeping pace with developments to learn about new research.

12. Acceptance Criterion
Developing regulations related to admission to the college or institute, whether) **(central admission or others mentioned** **Central admission – for morning studies** **Direct application for evening studies - according to grade and competition**

13. The Most Important Sources of Information About The Program
From methodological books, help books, the Internet, and scientific research

14. Program Development Plan
Continuous training of special skills and their application in scientific and practical fields **Practice using learning and teaching methods in all specialized fields**

Program Skills outline																	
				Required Program Learning Outcomes													
Year	Course Code	Course Name	Basic or Optional	Knowledge				Skills				Ethics					
1	ANCH121	Analytical Chemistry	Basic	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4		
1	ANPR123	Principles of animal	Basic	√	√		√	√		√		√	√	√	√		
1	FICR115	Principles of Field	Basic	√	√	√	√	√		√		√	√	√	√		
1	UOB104	Democracy and Human	Basic	√		√	√	√		√		√	√	√	√		
1	MATH111	Mathematics	Basic	√		√	√	√		√		√	√	√	√		
1	PLSU118	Plane Survey	Basic	√	√	√	√	√				√	√	√	√		
1	SOIL114	Principles of soil	Basic	√	√		√	√		√		√	√	√	√		
1	ENDR117	Engineering Drawing	Basic	√	√	√	√		√	√		√	√	√	√		
1	UOB101	Arabic language	Basic	√	√		√	√		√							
1	UOB102	English language1	Basic	√	√	√	√	√		√		√	√	√	√		
1	COMP101	applications of Computer	Basic	√	√	√	√	√		√		√	√	√	√		
1	AGEC129	Agricultural Economy	Basic	√	√	√		√		√		√	√	√	√		

MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information معلومات المادة الدراسية		
Module Title	**English Language**	**Module Delivery**
Module Type	**Core**	**☒ Theory**

Module Code	**UOB102**	☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**
ECTS Credits	**2**	
SWL (hr/sem)	**32**	

Module Level	1 1	**Semester of Delivery**	1
Administering Department	Type Dept. Code	**College**	Type College Code
Module Leader	Name	**e-mail**	E-mail
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		**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. Enabling Students to Access Scientific References: Learning English includes the ability to read and understand important research and studies in the field of agriculture, which enhances students' ability to benefit from these sources in their academic studies. 2. Improving Scientific Communication Opportunities: Learning English allows students to communicate with international scientists and researchers, and to participate effectively in conferences and workshops that are often conducted in English.

	3. Enhancing Scientific Writing Skills: Learning English helps students write reports and scientific papers professionally, which is essential for publishing their work in international scientific journals. 4. Utilizing Online Educational Resources: Learning English enables students to access training courses and agricultural curricula available online, which are often in English, thereby enhancing their educational opportunities. 5. Enhancing Employment Opportunities: Mastery of English is a key skill that opens up wide job opportunities in the global market, especially in fields such as agriculture and project management. It also allows graduates to benefit from modern technological applications
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	• Understanding Terminology: Ability to recognize and understand the terminology used in the agricultural sector. • Utilizing Modern Technologies: Ability to leverage and apply modern technologies in the agricultural field through the use of language skills. • Effective Communication: Ability to communicate and interact with diverse environments within the agricultural sector. • Applying Language Skills in the Job Market: Ability to use language skills to enter various job markets related to agriculture, facilitating connections between different disciplinary.
Indicative Contents المحتويات الإرشادية	**Introduction to Agricultural Terminology** • Common agricultural terms and jargon. • Vocabulary related to plant biology, soil science, pest management, and crop production. **Reading and Understanding Scientific Literature** • Techniques for reading scientific papers and reports. • How to interpret graphs, charts, and tables in agricultural studies. • Summarizing and critiquing research articles. **Understanding and Using Agricultural Data** • Analyzing and interpreting data related to agriculture.

	• Writing about statistical results and research findings. • Using language to explain complex data to non-specialists. **Employment and Career Development** • Crafting CVs and cover letters for agricultural positions. • Preparing for job interviews in English. • Networking and professional growth in the global agricultural sector.

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.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	109	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	7
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	91	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	6
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**200**		

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 Definition
Week 2	Agricultural Definition and terminology
Week 3	Tillage Definition and requirements
Week 4	Irrigation general view
Week 5	Irrigation methods
Week 6	Fertilizers general view
Week 7	Mid-term Exam
Week 8	Fertilizers types- comparison between all types
Week 9	Symptoms of element deficiency in plants
Week 10	Hydroponic systems
Week 11	Hydroponic systems
Week 12	Hydroponic systems
Week 13	Plant parts
Week 14	Plant parts
Week 15	Plant parts and functions
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	Oxford dictionary of agriculture and land management.	NO
Recommended Texts	gibsonburgagdept.weebly.com/uploads/2/3/5/5/23557960/plant_structure_and_functions_of_plants_-_pkt.pdf	No
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	Democracy and Human rights			**Module Delivery**	
Module Type				☒ **Theory**	
Module Code	UOB 104			☒ **Lecture**	
ECTS Credits	**2**			☒ **Lab**	
SWL (hr/sem)	**32**			☐ **Tutorial**	
				☐ **Practical**	
				☐ **Seminar**	
Module Level	1 1		**Semester of Delivery**	1	
Administering Department	Type Dept. Code		**College**	Type College Code	
Module Leader	Name : M.D. Widad Salem Muhammad		**e-mail**	E-mail: widad.mohammad@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	1- Focusing on the fact that rights and freedoms are an integrated theory that has developed throughout the eras of history, and has gone through historical turning points and events that were embodied after a conflict between two trends. The first is based on the foundations that authority is an end and individualism is to serve the legal system in order to achieve its interests. This naturally focuses on restricting freedoms and rights. 2- Focusing on the fact that the individual is a goal and that authority and the state achieve the individual's goal is a matter that occupied thought, leading to the laws embodying the idea of rights and freedoms in their current form and what religions and divine laws have added to it to form a basic source for this content. 3- Trying to convey the idea that the importance of rights education comes from a comprehensive and continuous process targeting all peoples and nations and working to consolidate the fulfillment of rights and duties through education, training and media.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Introducing students to human rights and its concept. Introducing students to the characteristics and types of human rights Students' knowledge of the idea of human rights in history Introducing students to the history of human rights Students' knowledge of the historical development of the idea of human rights Introducing students to the intellectual contribution to human rights A detailed explanation of the intellectual contribution to human rights Definition of types of rights

	Explain and clarify the types of public freedoms Introducing students to international human rights agreements A detailed explanation of the position of some international agreements Introducing students to democracy Introducing students to human rights in regional documents
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The lesson includes two theoretical hours, the number of hours per week distributed over 15 weeks.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل		**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب 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	**Human rights and its concepts**
Week 2	**Characteristics and types**
Week 3	**The historical development of the idea of human rights according to divine religions**
Week 4	**The historical development of the idea of human rights among ancient civilizations**
Week 5	**The historical development of the idea of human rights, in the contemporary period**
Week 6	**Intellectual contribution to the development of the idea of human rights in the West**
Week 7	**First-month exam**
Week 8	**Intellectual contribution to the development of the idea of human rights among Arabs**
Week 9	**Types of rights**
Week 10	**Types and public freedoms**
Week 11	**The position of some international agreements on human rights**
Week 12	**The position of some international agreements on human rights**

Week 13	**Democracy and public freedoms**
Week 14	**Human rights in declarations of rights and regional documents**
Week 15	**Second month 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	**The emergence of the theory of public rights and freedoms**	**The emergence of the theory of public rights and freedoms**
Recommended Texts	**Public freedoms and human rights, Dr. Muhammad Saeed** **A collection of international documents on human rights issued by the United Nations** **Public freedoms in contemporary constitutional systems / Dr. Karim Youssef Kashakesh** **The importance of human rights in the Third World / Basil Youssef**	**Public freedoms and human rights, Dr. Muhammad Saeed** **A collection of international documents on human rights issued by the United Nations** **Public freedoms in contemporary constitutional systems /**

		Dr. Karim Youssef Kashakesh **The importance of human rights in the Third World / Basil Youssef**
Websites	**Scientific journals**	

Grading Scheme مخطط الدرجات				
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MODULE DESCRIPTION FORM

نموذج وصف المادة الدراسية

Module Information **معلومات المادة الدراسية**		
Module Title	**Field Crops**	**Module Delivery**
Module Type	**Core**	☒ **Theory** ☒ **Lecture**
Module Code	**FICR115**	
ECTS Credits	**7**	

SWL (hr/sem)	**78**	**☒ Lab** **☐ Tutorial** **☐ Practical** **☐ Seminar**

Module Level	**1 1**	**Semester of Delivery**	**1**
Administering Department	**Field crops**	**College**	**Agriculture**
Module Leader	**Dr. Zainab Ahmed Abdul-Razzaq**	**e-mail**	**zainab.ahmed@uobasrah.edu.iq**
Module Leader's Acad. Title	**Lecture**	**Module Leader's Qualification**	**Ph.D.**
Module Tutor	**Dr. Zainab Ahmed Abdul-Razzaq**	**e-mail**	**E-mail: zainab.ahmed@uobasrah.edu.iq**
Peer Reviewer Name	**Name**	**e-mail**	**E-mail**
Scientific Committee Approval Date	**01/09/2025**	**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**	**Definition of field crop science, its economic importance, field crops, the most important classifications of field crops, and the impact of environmental conditions on field crop growth. Important agricultural processes in crop production are also introduced. Identify the most important field crops.**
Module Learning Outcomes **مخرجات التعلم للمادة الدراسية**	**1- Defining field crop science, its economic importance, field crops, and their main classifications** **2 -Understanding the impact of environmental conditions and their effects on field crops.** **3 -Introducing students to seed dormancy and how to eliminate it.** **4- Introducing students to the most important weeds prevalent in agricultural fields.**

	5- The agricultural cycle, its importance and benefits for plants, and how to design it 6- Educating students about cultivated field crops. 7 -Introducing students to the meaning of fertilizers, their types, and how to add fertilizers to crops. 8- Introducing students to biological factors.
Indicative Contents **المحتويات الإرشادية**	**The field crops course covers several main topics:** **1 .Definition of field crop science and its economic importance** **2-Field crops and their main classifications** **3- .The impact of environmental conditions on field crop growth** **4- .Introduction to important agricultural processes in crop production** **5-. Crop rotations, the most important weeds prevalent in crop fields, and their impact on crops**
`	

Learning and Teaching Strategies **استراتيجيات التعلم والتعليم**	
Strategies	**The main teaching strategy for this unit is to encourage students to participate in discussion, as well as a series of lectures and practical lessons designed to introduce them to field crop science. At the same time, their critical thinking skills will be refined and expanded through topics covered in the lectures. Including what are field crops, what is the classification of field crops, what are the appropriate conditions for the growth of field crops, and what are the agricultural processes followed to improve crop growth.**

Student Workload (SWL) **الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا**			
Structured SWL (h/sem) **الحمل الدراسي المنتظم للطالب خلال الفصل**	**75**	**Structured SWL (h/w)** **الحمل الدراسي المنتظم للطالب أسبوعيا**	**5**

Unstructured SWL (h/sem) **الحمل الدراسي غير المنتظم للطالب خلال الفصل**	**114**	**Unstructured SWL (h/w)** **الحمل الدراسي غير المنتظم للطالب أسبوعيا**	**6**
Total SWL (h/sem) **الحمل الدراسي الكلي للطالب خلال الفصل**	**200**		

Module Evaluation

تقييم المادة الدراسية

		Time/Number	Weight (Marks)	Week Due	Relevant Learning Outcome
Formative assessment	**Quizzes**	**6**	**15% (5)**	**Same week 1, 2, 3, 4**	**Same week 1, 2, 3, 4**
	Assignments	**6**	**10% (5)**	**2 and 12**	**LO #3, #4 and #6, #7**
	Projects / Lab.	**1**	**5% (10)**	**Continuous**	**All**
	Report	**6**	**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	**The effect of environmental conditions and temperatures on plant growth and yield**
Week 3	**The effect of light on plants and photoperiod**
Week 4	**The effect of drought on plant growth and the damage caused by excess water.**
Week 5	**Soil, texture, types of water in the soil, how to infer the presence of salinity in the soil**
Week 6	**Exam 1**
Week 7	**Effect of salinity, how to infer the presence of salinity in the soil,**
Week 8	**Germination of field crop seeds - factors affecting germination -**
Week 9	**Seed dormancy, what causes it, and how to get rid of it**
Week 10	**Definition of jungles, methods of combating them, and the losses they cause**
Week 11	**The agricultural cycle, its importance and benefits for plants, and how to design it**
Week 12	**A field visit to nearby crop fields to learn about plants**
Week 13	**Fertilizers and fertilization - Types of fertilizers -**
Week 14	**Methods of adding fertilizers**
Week 15	**Life factors and studying the relationship between field crops and other organisms**
Week 16	**Exam 2**

Delivery Plan (Weekly Lab. Syllabus) **المنهاج الاسبوعي للمختبر**	
	Material Covered
Week 1	**Lab 1: The concept of field crops science - divisions of field crops - scientific nomenclature**
Week 2	**Lab 2: Soil service operations - 1 - plowing - benefits of plowing - machines used in the plowing process**
Week 3	**Lab 3: Soil Service Operations 2- Smoothing 3- Leveling 4- Laser Leveling- Advantages of Land Amendment**
Week 4	**Lab 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.**
Week 5	**Lab 5: C - The method of cultivation according to the irrigation system. Advantages and disadvantages of each method**
Week 6	**Lab 6: Exam 1**
Week 7	**Lab 7: Crop service operations - hoeing 3- grafting - grafting - planting depth - planting distances**
Week 8	**Lab 8 Germination of field crop seeds - factors affecting germination - types of germination** **Calculate the percentage of germination**
Week 9	**Conducting a laboratory experiment - Requirements and how to conduct germination tests - Writing a report**
Week 10	**Lab 10: Botanical description of cereal and leguminous crops - display models**
Week 11	**Lab 11: Botanical description of oil crops and sugar crops - display models**
Week 12	**Lab 12: A field visit to nearby crop fields to learn about plants**
Week 13	**Lab 13: (Irrigation and drainage) - Irrigation methods - General benefits for the construction of drains**
Week 14	**Lab 14: Fertilizers and fertilization - types of fertilizers - ways to add fertilizers**
Week 15	**Harvest - Early and Late Harvest Damage**
Week 16	**Lab 16: Exam2**

Learning and Teaching Resources **مصادر التعلم والتدريس**		
	Text	**Available in the Library?**
Required Texts	**Muhammad Amin Omid Nouri (1986). Principles of Field Crops. Ministry of Higher Education and**	**Yes**

	Scientific Research. University of Basra. College of Agriculture. **Al-Ansari, Majeed Mohsen et al. (1980). Principles of Field Crops. Ministry of Higher Education and Scientific Research.**	
Recommended Texts	**Al-Ansari, Majeed Mohsen (1982). Field Crop Production. Ministry of Higher Education and Scientific Research. College of Agriculture, University of Baghdad.**	**yes**
Websites	**http://www.csdl.tamu.edu/FLORA/fsb/fsbfern1.htm** **http://www.botany.hawaii.edu/faculty/carr/equiset.htm**	

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 Information معلومات المادة الدراسية					
Module Title	**Analytical Chemistry**			**Module Delivery**	
Module Type	**Core**			☒ **Theory** ☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	ANCH121				
ECTS Credits	**7**				
SWL (hr/sem)	**78**				
Module Level	1 1		**Semester of Delivery**	1	
Administering Department	Crops Depratment		**College**	Agriculture college	
Module Leader	Maryam abdulbary		**e-mail**	mariam.ouraiby@uobasrah.edu.iq	
Module Leader's Acad. Title	Assistant Professor		**Module Leader's Qualification**	Master	
Module Tutor	Maryam abdulbary		**e-mail**	mariam.ouraiby@uobasrah.edu.iq	
Peer Reviewer Name			**e-mail**		
Scientific Committee Approval Date			**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	1-Builds the effect of analytical chemistry and types of quantitative analysis methods

	2-Uses all analytical chemistry tools 3-Detects errors in chemical analysis, diagnoses its type, reduces its effect in the laboratory, and corrects it statistically
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	The student will be able to: 1-Explain the basics of analytical chemistry and the steps of analysis 2-Compare qualitative and quantitative analysis 3-Know acids and bases with their theories and explain their behaviors 4-Explain volumetric analysis and express weight calculations 5-Express methods of analysis by titration
Indicative Contents المحتويات الإرشادية	1-Scope of Analytical Chemistry: Searches for ever-improving means of measuring the chemical composition of natural and synthetic materials using techniques to identify the substances that may be present in a substance and to determine the exact amounts of the specific substance. 2-Quantitative Analysis: Includes explanation of the technique that uses mathematical and statistical modeling, measurement, and research to understand the behavior 3-acids and bases. 4-Chemical Equilibrium: Refers to the state of a system in which the concentration of reactants and the concentration of products do not change over time.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The modern teaching strategy includes achieving learning objectives in general and teaching chemical concepts in particular, as well as the difficulties students face in understanding and acquiring chemistry concepts, and addressing the difficulties by defining chemistry concepts and helping students acquire the correct chemical concepts..

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا

Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	93	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	6
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	57	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	4
Total SWL (h/sem) الحمل الدراسي الكلي للطالب 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	Introduction to Analytical Chemistry and Equivalent Gravimetry
Week 2	Volumetric analysis - solutions – calculations
Week 3	Methods of expressing concentration (molarity, standard, normality, weight and volume ratio)
Week 4	Acids and bases
Week 5	pH - Degree of ionization
Week 6	First exam
Week 7	Hydrolysis of salts - types of salts
Week 8	Buffered Solutions – Guides
Week 9	Setting the equivalence point
Week 10	Oxidation and reduction corrections
Week 11	Volumetric analysis processes
Week 12	Types of corrections
Week 13	Gravimetric analysis - Gravimetric coefficient
Week 14	Precipitating reagents - post-precipitation
Week 15	Second exam
Week 16	

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Laboratory safety and identification of glassware and equipment in analytical chemistry laboratories
Week 2	Determination of hydrochloric acid concentration using a standard solution of sodium carbonate
Week 3	Preparation and titration of sodium hydroxide solution

Week 4	Determine the mixture of carbonates and bicarbonates.
Week 5	The first test
Week 6	Determination of acidity of vinegar
Week 7	Sedimentary correction

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Analytical Chemistry Fundamentals of Analytical Chemistry Principles and Practice of Analytical Chemistry	Yes
Recommended Texts	Modern Analytical Chemistry.	No
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	**Animal Production**		**Module Delivery**	
Module Type	**Core**		☒**Theory** ☐ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**	
Module Code	**ANPR123**			
ECTS Credits	**7**			
SWL (hr/sem)	**78**			
Module Level	1 1		**Semester of Delivery**	**One**
Administering Department	**Animal Production**		**College**	**Agriculture**
Module Leader	**Prof. Dr. Alfred Sulaka Karomy Hana**		**e-mail**	**E-mail:** alfred.solaka@uobasrah.edu.iq
Module Leader's Acad. Title	**Professor**		**Module Leader's Qualification**	**Ph.D.**
Module Tutor			**e-mail**	**Email**
Peer Reviewer Name	Name		**e-mail**	E-mail
Scientific Committee Approval Date	29/08/2025		**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. 3. Teaching students the role of successful management (human factor or the breeder himself) of small and large ruminant fields. 4. Spreading the culture of benefiting from animal by-products such as manure waste and animal waste, and benefiting from animals in work. 5. Identifying the types of farm animals and the most important projects related to their breeding. 6. Solving administrative problems in cattle, sheep, and goat breeding fields.

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	1. Enabling students to think and analyze topics related to the intellectual framework of the Principles of Animal Production subject 2. Enabling students to think and analyze topics related to animal species and the most important projects related to their breeding. 3. Enabling students to think and analyze topics related to identifying

	administrative problems in animal fields and working to address them. 4. 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) المنهاج الاسبوعي للمختبر(الحقل **Filed**)	
	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

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)	**32**		
Module Level	1 1	**Semester of Delivery**	1

Administering Department	Animal production	**College**	Agriculture
Module Leader	Name	**e-mail**	E-mail
Module Leader's Acad. Title	Professor	**Module Leader's Qualification**	Ph.D.
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	01/06/2025	**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	أهمية اللغة العربية للاختصاصات العلمية وميزتها بين اللغات الحية تجنب الاخطاء 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	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 لفظا أو جزءا من لفظ.	المحتويات الإرشادية

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 اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	33	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	2
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	17	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	2
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	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	الاحرف 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	**Core**			☒ **Theory**	
Module Code	UOB103			☒ **Lecture**	
ECTS Credits	**3**			☒ **Lab**	
SWL (hr/sem)	**48**			☐ **Tutorial**	
				☐ **Practical**	
				☐ **Seminar**	
Module Level	1 1		**Semester of Delivery**	1	
Administering Department	Type Dept. Code		**College**	Type College Code	
Module Leader	Name : Akram Abdel-Daem Ahmed Touma		**e-mail**	E-mail: akram.ahmed@uobasrah.edu.iq	
Module Leader's Acad. Title	Assit.lecture		**Module Leader's Qualification**	MSC	
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	Explain how the student uses the computer program and how to deal with its applications.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	Teaching students about the components of the calculator and how to use its programs and applications so that students have a comprehensive knowledge of the calculator. The student's knowledge of the basics of computer learning Teaching students the main components of the computer and its most important keys Knowledge of the components of the window system Students know how to create folders
Indicative Contents المحتويات الإرشادية	

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	The lesson includes (2) hours of theory and (3) hours of practical - the number of weekly hours is 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		**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب 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	**Definition of computer** **Introduction to the study of computers and types of computers**
Week 2	**Main components of a computer** **The most important Special Keys on the keyboard**
Week 3	**WINDOWS SYSTEM**
Week 4	**Folders** **How to create a folder**
Week 5	**First month exam**
Week 6	**Properties**
Week 7	**Start and its components**
Week 8	**Paint program** **Paint Windows drawing window**
Week 9	**Notepad program**
Week 10	**WordPad program**
Week 11	**Who is smarter, computer or human?**
Week 12	**An overview of the Internet**
Week 13	**How can we know the file type from its extension?**
Week 14	**Copy the file without burning it**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	تطبيقات مباشرة على الحاسبة
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	**There are no methodological books**	**There are no methodological books**
Recommended Texts	**Computer Curricula, Electronic Calculator Center,**	**Computer Curricula, Electronic Calculator Center,**
Websites	**No**	

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 Economy**			**Module Delivery**	
Module Type	**Core**			☒ **Theory**	
Module Code	**AGEC129**			☒ **Lecture**	
ECTS Credits	**5**			☒ **Lab**	
SWL (hr/sem)	**33**			☐ **Tutorial**	
				☐ **Practical**	
				☐ **Seminar**	
Module Level	1 1		**Semester of Delivery**	1	
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	2/09/2025		**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.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل		**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل		**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**200**		

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 العلمي/1980**	Yes
Recommended Texts	**مباديء الاقتصاد الزراعي/د.احمد أبو اليزيد.**	No
Websites	**كتاب الاقتصاد الزراعي PDF - فور ريد	محمود سليم (4readlib.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	**Soil Science**	**Module Delivery**
Module Type	**Core**	**☒ Theory**

Module Code	SOLL114	☒ **Lecture** ☒ **Lab** ☐ **Tutorial** ☐ **Practical** ☐ **Seminar**
ECTS Credits	**7**	
SWL (hr/sem)	**78**	

Module Level	1 1	**Semester of Delivery**	1
Administering Department	Crop prpduction	**College**	College of Agriculture
Module Leader	Wafaa Abdulameer Ahmed	**e-mail**	E-mail: wafa.ahmed@uobasrah.edu.iq
Module Leader's Acad. Title	Assist. of Professor	**Module Leader's Qualification**	Ms. C.
Module Tutor	Name (if available)	**e-mail**	E-mail
Peer Reviewer Name	Name	**e-mail**	E-mail
Scientific Committee Approval Date	01/06/2025	**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	1. Understanding Soil Formation: • Learn about the processes of soil formation and the factors that

	influence soil development. 2. Soil Properties and Classification: • Identify and describe physical, chemical, and biological properties of soils. • Understand soil classification systems and their significance. 3. Soil Function and Ecosystem Services: • Explore the role of soil in ecosystems, including its functions in water filtration, nutrient cycling, and carbon storage. 4. Soil Management Practices: • Examine sustainable soil management practices to enhance soil health and productivity. 5. Impact of Soil on Agriculture: • Analyze how soil characteristics affect agricultural practices and crop production.
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1. Soil Conservation and Land Use: • Identify practices for soil conservation and erosion control. • Analyze the impact of land use changes on soil health. 2. Environmental Impact: • Evaluate the role of soils in environmental sustainability and ecosystem services. • Assess the impact of pollutants on soil health and remediation strategies. 3. Research and Practical Skills: • Conduct soil sampling and laboratory analysis. • Apply statistical methods to interpret soil data. 4. Interdisciplinary Applications: • Integrate knowledge from related fields such as agronomy, ecology, and geology. • Discuss the implications of soil science in climate change and food security. .
Indicative Contents المحتويات الإرشادية	Soil formation and Soil genesis (20 hrs) physical properties (20 hrs)

	soil water(20 hrs) Colloid's properties and soil chemical properties (20 hrs) Salinity and alkalinity in the soil and the reclamation of salt-affected soils(20 hrs) Biological and biochemical properties of soil (20 hrs) Soil fertility and plant nutrition and Soil organic matter(20 hrs) Classification and management of soils in Iraq (10 hrs) Total hrs = 150= SSWL - (Exam hrs) = 150 - 4 = 146 hr (Time table hrs x 15 weeks)

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	Here are some effective learning and teaching strategies for soil science: 1. Hands-On Experiments • Conduct soil sampling and analysis in the field. • Use soil texture tests (e.g., ribbon test) to determine soil types. 2. Field Trips • Visit local farms, gardens, or conservation areas to observe soil in various contexts. • Explore soil management practices in different ecosystems. 3. Interactive Learning

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	75	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem)	75	**Unstructured SWL (h/w)**	5

الحمل الدراسي غير المنتظم للطالب خلال الفصل		الحمل الدراسي غير المنتظم للطالب أسبوعيا	
Total SWL (h/sem) الحمل الدراسي الكلي للطالب 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	15% (10)	Continuous	All
	Report	1	5% (10)	13	LO #5, #8 and #10
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	LO #1 - #7
	Final Exam	2hr	50% (50)	16	All
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Syllabus) المنهاج الاسبوعي النظري	
	Material Covered
Week 1	Soil formation
Week 2	Soil genesis
Week 3	physical properties

Week 4	physical properties
Week 5	soil water
Week 6	monthly exams
Week 7	Colloid's properties
Week 8	soil chemical properties
Week 9	Salinity and alkalinity in the soil
Week 10	the reclamation of salt-affected soils
Week 11	Biological and biochemical properties of soil
Week 12	Soil fertility and plant nutrition
Week 13	monthly exams
Week 14	Soil organic matter
Week 15	Classification and management of soils in Iraq
Week 16	Preparatory week before the final Exam

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Moisture content measurement
Week 2	Measuring the particle and bulk density of soil and its porosity
Week 3	Estimation of percentages of sand, clay and silt and determination of soil texture
Week 4	Measurement of soil pH and soil salinity
Week 5	Determination of some positive dissolved ions in soil solution (Ca2+, Mg2+, Na+ and K^{+})
Week 6	Determination of some negative dissolved ions in soil solution (Cl^{-}, CO_3^{-2} and HCO_3^{-})
Week 7	Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Fundamentals of Soil	Yes
Recommended Texts	Practices soil Science	yes
Websites	https://www.slideshare.net/SantoshFrnd1/agro-ecological-region-and-sub-rgions-of-india	

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	**Engineering Drawing**			**Module Delivery**	
Module Type	**Core**			☒ **Lab** ☒ **Tutorial** ☒ **Practical**	
Module Code	**ENDR117**				
ECTS Credits	**7**				
SWL (hr/sem)	**48**				
Module Level	1 1		**Semester of Delivery**	2	
Administering Department			**College**		
Module Leader	Asmaa Abd Ala AL Aedan		**e-mail**	E-mail	
Module Leader's Acad. Title	Lecture		**Module Leader's Qualification**	Msc.	
Module Tutor	Ali Hussein Awad		**e-mail**	ali.awad@uobasrah.edu.iq	
Peer Reviewer Name	Assad Yousif Khudher		**e-mail**	E-mail assad.khudher@uobasrah.edu.iq	
Scientific Committee Approval Date	01/09/2025		**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	• Working in the field of engineering drawing to create engineering plans and drawings • Obtaining the skills required for the post-graduation plan (postgraduate studies). • Applying for external tests by local/regional/international bodies. • Providing students with skills to work in scientific and research laboratories and study engineering drawing
Module Learning Outcomes مخرجات التعلم للمادة الدراسية	1- Learn about manual drawing tools and modern methods 2- Correct installation of the drawing board and implementation of the information table 3- Professional drawing of lines, curves, and circles 4- Drawing of projections 5- Other methods for drawing projections 6- Perspective drawing 7- Section drawing, shading, and drawing of hidden parts 8- Detailed drawing 9- Assembly drawing 10- Inking 11- Methods of saving drawing boards 12- Quick drawing 13- Documenting and authenticating the boards 14- Executive drawing 15- Learn about automated drawing

Indicative Contents المحتويات الإرشادية	Indicative content includes the following. - Accuracy - Imagination - Clear ideas before starting to draw - Taking into account all dimensions including the dimensions of the size and the dimensions of the site - Take all the information, data and ratification Determine the shades of the cut, the vehicle, and the hidden parts - Setting details to read the painting and all process and assembly fees - Clean and take into account the conditions for saving paintings

Learning and Teaching Strategies استراتيجيات التعلم والتعليم	
Strategies	-To practice in the first place and apply scientific conditions in drawing parts and mechanical systems - Watch models and models on reality (physics) to help imagine and apply - Evaluating the duties after completing them immediately Classical evaluation and the end of the course

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	45	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	3
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	80	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	5
Total SWL (h/sem)	**125**		

الحمل الدراسي الكلي للطالب خلال الفصل	

Module Evaluation تقييم المادة الدراسية					
		Time/Number	**Weight (Marks)**	**Week Due**	**Relevant Learning Outcome**
Formative assessment	**Quizzes**	5	5%(5)	5 and 10	All 3 h Structured
	Assignments	5	5% (5)	2 and 15	All 3 h Structured
	Projects / Lab.	10	20% (20)	Continuous	All hours Structured
	Report	0	0	0	
Summative assessment	**Midterm Exam**	2hr	10% (10)	7	The Structured after 7 week
	Final Exam	3hr	50% (50)	16	The Structured all 16-week
Total assessment			100% (100 Marks)		

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي نظري +العملي (مختبر الرسم)	
	Material Covered
Week 1	Introduction to engineering drawing tools
Week 2	Introduction to the types of engineering drawing lines
Week 3	How to plan and install a drawing board
Week 4	Engineering operations, part one, includes A- Bisecting a straight line and B- Bisecting an angle.

Week 5	Engineering operations, part two, includes: C- Draw a pentagon inside a circle.
Week 6	Engineering operations, part three, includes: D- Draw a hexagon given the side length and E- Draw a hexagon surrounding a circle
Week 7	Engineering operations, part four, includes: E- Draw an arc tangent to a straight line
Week 8	Engineering operations, part Five, includes: F- Draw an arc tangent to the circumference of a circle and a known straight line, and Draw a tangent to an interior circle.
Week 9	Dimensions of size and dimensions of the site
Week 10	Drawing of the projected (three faces)
Week 11	The drawing of the engineering (six faces)
Week 12	Perspective drawing (model)
Week 13	Draw the pieces and script
Week 14	The concept of detailed and assembly
Week 15	Inheritance
Week 16	The concept of drawing using the machine and Preparatory week before the Final Exam

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	الرسم الهندسي لطلبة كليات الزراعة. د. ناطق صبري حسن. 9	Yes
Recommended Texts	Engineering drawing for engineers and technicians	No
Websites	https://books-library.net/free-1020743869-download	

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	**Plane surveying**			**Module Delivery**	
Module Type	**Core**			☒ **Theory**	
Module Code	**PLSU118**			☒ **Lecture**	
ECTS Credits	**6**			☒ **Lab**	
SWL (hr/sem)	**78**			☐ **Tutorial**	
				☐ **Practical**	
				☐ **Seminar**	
Module Level		**UG11 1**	**Semester of Delivery**		**1**
Administering Department		**Field Crops**	**College**	Type College Code	
Module Leader	Mohanad A. ALSULAIMAN		**e-mail**	Mohanad.alsulaiman@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	01/06/2025	**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	1. Identify the method of drawing maps for areas and fields and identify the types of drawing scales and their design 2. 2- Identify the tools, units and measurement systems 3. 3- Identify the optical distance measuring devices, their parts, method of use and working principle 4. 4- Focus on knowing the parts and method of using the level and theodolite devices and the advantages of using them 5. 5- Measuring the quantities of excavation and backfill 6. 6- Measuring levels and chain leveling
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. Identify the method of drawing maps for areas and fields and identify the types of drawing scales and their design 2. 2- Identify the tools, units and measurement systems 3. 3- Identify the optical distance measuring devices, their parts, method of use and working principle 4. 4- Focus on knowing the parts and method of using the level and theodolite devices and the advantages of using them 5. 5- Measuring the quantities of excavation and backfill 6. 6- Measuring levels and chain leveling
Indicative Contents المحتويات الإرشادية	Indicative content includes the following. <u>Part A - Circuit Theory</u> DC circuits – Current and voltage definitions, Passive sign convention and circuit elements, Combining resistive elements in series and parallel.

	Kirchhoff's laws and Ohm's law. Anatomy of a circuit, Network reduction, Introduction to mesh and nodal analysis. [SSWL=15 hrs] AC circuits I – Time dependent signals, average and RMS values. Capacitance and inductance, energy storage elements, simple AC steady-state sinusoidal analysis. [15 hrs] AC Circuits II - Phasor diagrams, definition of complex impedance, AC circuit analysis with complex numbers. [SSWL=10 hrs] RL, RC and RLC circuits - Frequency response of RLC circuits, simple filter and band-pass circuits, resonance and Q-factor, use of Bode plots, use of differential equations and their solutions. Time response (natural and step responses). Introduction to second order circuits. [SSWL=15 hrs] Revision problem classes [SSWL=6 hrs] <u>Part B - Analogue Electronics</u> Fundamentals Resistive networks, voltage and current sources, Thevenin and Norton equivalent circuits, current and voltage division, input resistance, output resistance, coupling and decoupling capacitors, maximum power transfer, RMS and power dissipation, current limiting and over voltage protection. [SSWL=15 hrs] Components and active devices – Components vs elements and circuit modeling, real and ideal elements. Introduction to sensors and actuators, self-generating vs modulating type sensors, simple circuit interfacing. [SSWL=14 hrs] Diodes and Diode circuits – Diode characteristics and equations, ideal vs real. Signal conditioning, clamping and clipping, rectification and peak detection, photodiodes, LEDs, Zener diodes, voltage stabilization, voltage reference, power supplies. [SSWL=15 hrs]

	Total hrs = 200 = SSWL - (Exam hrs) = 200 - 4 = 195 hr (Time table hrs x 15 weeks)

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.

Student Workload (SWL) الحمل الدراسي للطالب محسوب لـ ١٥ اسبوعا			
Structured SWL (h/sem) الحمل الدراسي المنتظم للطالب خلال الفصل	200	**Structured SWL (h/w)** الحمل الدراسي المنتظم للطالب أسبوعيا	5
Unstructured SWL (h/sem) الحمل الدراسي غير المنتظم للطالب خلال الفصل	125	**Unstructured SWL (h/w)** الحمل الدراسي غير المنتظم للطالب أسبوعيا	8
Total SWL (h/sem) الحمل الدراسي الكلي للطالب خلال الفصل	**200**		

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,

assessment					#11
	Assignments	2	10% (10)	2 and 12	LO #3, #4 and #6, #7
	Projects / Field	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 and Definition of survey, types of surveys, its importance in agriculture, requirements for a good survey
Week 2	Measurement systems, units of measurement, accuracy in surveys, errors
Week 3	Drawing scales, types, features, how to doing it.
Week 4	Methods for measuring distances, from nature and from maps, direct methods for horizontal and diagonal distances
Week 5	Errors in survey work, methods of addressing and overcoming them
Week 6	Surveying by tape, station selection conditions, field book note
Week 7	Mid-term Exam + Indirect methods of measuring distances, how to use surveying devices for this purpose
Week 8	Measuring distances using electronic devices
Week 9	Areas, how to calculate them for regular and irregular shapes, calculate areas using some

	devices
Week 10	Leveling, its terminology, its importance in agriculture, the use of the level.
Week 11	Types of leveling, curvature and refraction phenomena and their treatment
Week 12	Methods for calculating point levels and elevation difference, direct and indirect
Week 13	Second exam+ working the longitudinal sectors, how to calculate the slope and draw the longitudinal section
Week 14	Calculation of excavation and backfill quantities
Week 15	**Preparatory week before the final Exam**

Delivery Plan (Weekly Lab. Syllabus) المنهاج الاسبوعي للمختبر	
	Material Covered
Week 1	Lab 1: Drawing maps and how to put scale
Week 2	Lab 2: learning how to measure distance at plane and winding lands by different meters
Week 3	Lab 3: Applied how to erect and drop a column by several ways
Week 4	Lab 4: Application of distance measurement process using leveling device
Week 5	Lab 5: Measure distances by a leveling device
Week 6	Lab 6: Apply Leveling and chain leveling
Week 7	Lab 7: Calculation of excavation and backfill quantities

Learning and Teaching Resources مصادر التعلم والتدريس		
	Text	**Available in the Library?**
Required Texts	Plane Survey a methodical book	Yes
Recommended Texts	Surveying-to New Age International Pvt Ltd Publishers (2006)-A.M. Chandra	No

Websites	https://www.britannica.com/technology/surveying

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