

Ministry of Higher Education and Scientific Research

Kirkuk University / college of Agriculture

Department of Forestry



Academic Program and Course Description Guide Department of Forestry Kirkuk University /College of Agriculture 2024

Academic Program Description

University Name: Kirkuk Faculty/Institute: College of Agriculture Scientific Department: Forests sciences Academic or Professional Program Name: B.Sc. Forests sciences Final Certificate Name: B.Sc. Agricultural Sciences (Forests sciences) Academic System: Semester Description Preparation Date: 02 / 04 / 2024 File Completion Date: 02 / 04 / 2024

Signature: Head of Department Name: Assist, Prof. Dr. Mateen Yilmaz Izaldin Date: 02 / 04 / 2024

Signature: 4

Scientific Associate Name: Prof. Dr. Ammar Qahtan Shanoon Date: 02 / 04 / 2024

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Date: 04/04/2024 Signature: hat

Approval of the Dean Dr. OSamah 2. Almet 04/04/2024

وامعة كركوك كلية الزراعة

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ن الجودة والاداء ا

Course Description

1. Program Vision

Working to expand and sustain green cover due to its economic, protective and social benefits for the region and its residents by graduating specialized and trained cadres in forest sciences.

2. Program Mission

Strengthening the department's contribution to the advancement of the agricultural, forestry and industrial situation in terms of the use of wood as a raw material in many major industries and the environment as one of the main factors contributing to its preservation, through the department's various scientific activities, the product of the teaching staff, and the good scientific level of its graduates.

3. Program Objectives

 Graduating specialized cadres trained in various forest sciences capable of serving society.

 Developing scientific curricula related to forest sciences and other sciences that influence them.

 Contributing to solving forest problems inside Iraq through research, studies and discussion circles.

 Increase awareness of the local community through introductory brochures, seminars, intensive training courses, and community involvement in its operations.

 Developing the scientific level through cultural exchange and twinning programs and training courses with counterparts from international institutions.

4. Program Accreditation

The program seeks to obtain program accreditation.

5. Other external influences

Coordination with relevant agricultural departments as well as private sector participation.

6. Program Structure									
Program Structure	Number of Courses	Credit hours	Percentage	Reviews*					
Institution Requirements	11	11	18.64	Basic					
College Requirements	18	44	30.50	Basic					
Department Requirements	30	87	50.84	Basic					
Summer Training	1	Satisfied	(Basic					
Other									

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

Year/Level	Course Code	Course Name	Credit Hours				
First			Theoretical	Practical			
year/first	COMP111	Applications in computers 1	-	3			
semester	MATH112	mathematics	2	-			
	GEOL113	Geologist	2	3			
	PRAN114	Principles of animal production	2	3			
	GEPL115	General plant	2	3			
	ENGL116	English language 1	1	-			

	GEFO117	Forest principles	2	3
	HURI118	Human rights	2	-
First	STAT121	Statistics	2	3
year/second	GEEC122	General economics	2	-
semester	ORCH123	organic chemistry	2	3
	PLMO124	Plant morphology and anatomy	2	3
	SURV125	space	1	3
	COMP126	Applications in computers 2		3
	GEDR127	Engineering drawing	-	3
Second	DEND211	Classification of forest trees	2	3
year/first	BICH212	Biochemistry	2	3
semester	MIBI213	Principles of microbiology	2	3
	FOMA214	Forest machinery	2	3
	GENE215	heredity	2	3
	TRAG216	Transfer of agricultural techniques	2	-
	COMP217	Applications in computers 3	-	3
	CRBE218	Baath Party crimes	2	-
Second	FOSO221	Forest soil	2	3
year/second	PRSI222	Principles of forest development	2	3
semester	ECOL223	Environment and climate	2	3
	FOEN224	Forest insects	2	3
	NARA225	Natural pastures	2	3
	COMP226	Applications in computers 4	-	3
	FRDE227	Freedom and democracy	2	-
	ENGL228	English 2	1	-
Third	FOME311	Forest measurements	2	3
year/first	FOUT312	Forest investment	2	3
semester	FONU313	Forest nurseries	2	3
	FOPH314	The sedge of forest trees	2	3
	FOPO315	Forest policy	2	-
	FOPA316	Forest diseases	2	3
	RESE317	Remote sensation	2	3

Third	WIAN321	wild animals	2	3
year/second	PLAN322	afforestation	2	3
semester	WAPE323	River basin management	2	3
	EXDE324	Design and analysis of experiments	2	3
	TOUR325	Tourism and parks	2	-
	WOSC326	Wood science	2	3
	ENGL327	English 3	1	-
Fourth	SILV411	Forest development systems	2	3
year/first	FOPL412	Forest planning	2	3
semester	WOIN413	Wood industry	2	3
	FOPT414	Forest maintenance	2	3
	FOEC415	Forest economy	2	-
	REPR416	Graduation research project	-	3
	FOEC417	Forest environment	2	3
	ENGL418	English 4	1	-
Fourth	FOPR421	Evaluation of forest projects	2	3
year/second	FOMA422	Forest management	2	3
semester	FOEN423	Forest engineering	2	3
	TRBR424	Breeding and improving trees	2	3
	WOPR425	Wood preservation	2	3
	REPR426	Graduation research project	-	3
	SEMI427	Seminars	1	-

8. Expected learning outcomes of the program

Knowledge

1- Introducing the student to theories related to various forest sciences.

2- Understanding forest creation and care.

3- Understanding and solving problems and obstacles related to forests.

4- Enabling the student to understand forest sciences and equipping various relevant departments

with specialized scientific cadres

5- Teaching students the management methods used in industrial forest construction projects.

6- Teaching students to diagnose forest trees infected with diseases and insects and find ways to combat them.

Skills

 Providing the student with the skills to carry out forest construction operations and methods of caring for them.
 Preparing agricultural cadres capable of dealing with forest trees, spreading their cultivation, and how to sustain the areas cultivated in them.

3- Enabling the student to be able to diagnose the problems facing forests.

4- Qualifying students to advance the forest situation that the department is interested in in its study programs.

Ethics

- 1- Having the ability to ask questions and answer 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.

9. Teaching and Learning Strategies

1– Using the method of delivering information through the lecture, using the whiteboard, a data display device, an interactive lecture, and displaying an educational video that provides the opportunity to watch field or laboratory operations.

2- Involving students in obtaining information by asking them to submit scientific reports on specific paragraphs of the curriculum, ensuring the expansion of the student's cognitive ability and training him on means of accessing information to maintain the up-to-datedness of his information in the future.

3- Training students in the method of logical discussion to reach results, as well as the method of deduction.

4- Training the student on educational commitment to behavior inside the lecture hall, in the laboratory, field, or greenhouses, ensuring the prevalence of sound behavior in the educational institution and after graduation.

5- Learning through applied field practices and providing the opportunity for students to apply knowledge in the field.

10. Evaluation methods

- 1- Daily exams.
- 2- Reports.
- 3- Monthly exams.
- 4- Practical exams.
- 5- The final exam, both theoretical and practical.
- 6- Summer training in government departments and submitting a report.

Faculty Members	S						
Academic Rank	Specializatio	'n	Special Requirements/Skills (if applicable)	Number of the teaching staff			
	General	Special		Staff	Lecturer		
Professor	Forest sciences	Wood tree insects		1			
Assistant Professor	Forest sciences	Wood science		1			
Assistant Professor	Horticulture and landscaping	Ornamental plants		1			
Assistant Professor	Law	Civil Law		1			
lecturer	Food industry	Food industry		1			
lecturer	Law	Civil Law		1			

Assistant lecturer	Forest sciences	Insects and forest protection	1	
Assistant lecturer	Horticulture and landscaping	Horticulture and landscaping	1	
Assistant lecturer	Geography	Geographic information systems and remote sensing	1	

Professional Development

Mentoring new faculty members

A regular meeting of the Department Council is held twice a month in order to convey the directives of the Dean of the College as well as the directives of the Department Head regarding department matters, following up on students and the progress of the educational process, as well as encouraging them for scientific research. We also communicate with them through social media to guide them.

Professional development of faculty members

Annual plans are developed to update course curricula through the department's Curriculum Modernization Committee. A semi-annual plan is also prepared for the research that the department's staff seeks to accomplish and the use of modern teaching and evaluation methods that employ modern communication technology, as well as the results of teaching methods research.

12. Acceptance Criterion

The department sets a plan for accepting students according to capacity, the number of teaching staff, and the provision of academic supplies. On this basis, the department requests the specified number of students to join it, but achieving the required number is affected by several factors, including the number of

students accepted into the college distributed through central admission in the Ministry, and the student's desire for the specialty in which he wishes to complete his studies.

13. The most important sources of information about the program

1- Methodological books on free education.

2- Internet resources through the Internet Division.

3- Reference books, master's theses, and doctoral theses in the department and college libraries.

14. Program Development Plan

1- Concluding joint cooperation agreements with relevant agricultural institutions for the purpose of creating job opportunities for graduates of the Department of Forestry Sciences, as well as providing those institutions with the results of scientific research reached by researchers in the department.

2- Taking advantage of agricultural companies in the private sector to utilize their capabilities to enhance the learning process for students in the department as well as creating job opportunities for graduates.

3- Providing the department's laboratories with modern laboratory equipment and benefiting from them to supplement the department's financial inputs by operating those laboratories to serve agricultural institutions and private sector companies after paying the financial fees.

4- Increasing the rate of scientific publishing by the department's faculty, especially in scientific journals classified within the international databases.

5- Providing the department's staff with scientific specializations, including two teachers, by creating attractive factors for them, and working to encourage the current staff to advance academically to higher ranks.

			Progra	m Sk	ills C	Dutlin	ne								
				Required program Learning outcomes											
Year/ Level	Course Name	Course code	Basic or	Knowledge			Skills				Ethics				
			optional	A1	A2	A3	A4	B1	B2	B3	B4	C1	C2	C3	C4
First vear/	Applications in computers 1 mathematics	COMP111 MATH112		*	*	*	*	*	*	*	*	*	*	*	*
first	Geologist	GEOL113													
semester	Principles of animal production	PRAN114													
1	General plant	GEPL115													
	English language 1	ENGL116													
	Forest principles	GEFO117													
	Human rights	HURI118													
First	Statistics	STAT121		*	*	*	*	*	*	*	*	*	*	*	*
vear/	General economics	GEEC122													
Second	Plant morphology and anatomy	DI MO124													
semester	surveying	SURV125													
	Applications in computers 2	COMP126													
	Engineering drawing	GEDR127													
	Classification of forest trees Biochemistry	DEND211 BICH212	*	*	*	*	*	*	*	*	*	*	*	*	*

Second Year/ first semester	Principles of microbiology Forest machinery heredity Transfer of agricultural techniques Applications in computers 3 Baath Party crimes	MIBI213 FOMA214 GENE215 TRAG216 COMP217 CRBE218													
Second Year / Second semester	Forest soil Principles of forest development Environment and climate Forest insects Natural pastures Applications in computers 4 Freedom and democracy English 2	FOSO221 PRSI222 ECOL223 FOEN224 NARA225 COMP226 FRDE227 ENGL228	*	tk.	*	*	*	*	*	*	*	ste.	vk.	*	
Third Year/ first semester	Forest measurements Forest investment Forest nurseries The sedge of forest trees Forest policy Forest diseases Remote sensation	FOME311 FOUT312 FONU313 FOPH314 FOPO315 FOPA316 RESE317	*	*	*	*	*	*	*	k	*	*	*	*	*

Third Year/ Second semester	wild animals afforestation River basin management Design and analysis of experiments Tourism and parks Wood science English 3	WIAN321 PLAN322 WAPE323 EXDE324 TOUR325 WOSC326 ENGL327	*	*	*	*	*	*	*	*	*	*	*	*	*
fourth year/ first semester	Forest development systems Forest planning Wood industry Forest maintenance Forest economy Graduation research project Forest environment English 4	SILV411 FOPL412 WOIN413 FOPT414 FOEC415 REPR416 FOEC417 ENGL418	*	*	*	*	*	*	*	*	*	*	*	*	*
fourth year/ second semester	Evaluation of forest projects Forest management Forest engineering Breeding and improving trees Wood preservation Graduation research project Seminars	FOPR421 FOMA422 FOEN423 TRBR424 WOPR425 REPR416 SEMI427	*	*	*	*	*	*	*	*	*	*	÷	*	*

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

	Course Description Form										
1. Course Name:											
Computer/1											
2. Course Code:											
COMP111											
3. Semester / Year:											
first semester/ fi	irst year										
4. Description Preparation Date:	24										
5 Available Attendance Forms:	24										
S. Available Attendance Forms. Mandator	"V										
6. Number of Credit Hours (Total) / Number of U	Jnits (Total)										
(3) Hours, Number	of units (1)										
7. Course administrator's name (mention all, if m	ore than one name)										
Name:Assist Prof. Basira Abdullah Ahmed Emai	il: <u>baseraabdullah@uokirkuk.edu.iq</u>										
8. Course Objectives											
Introducing the student to the components of the computer, explaining the units of											
information input and graduation, and providing and developing the student's abilities by											
using the main applications in the computer											
9. Teaching and Learning Strategies											
verbal communication with students, urging them to v	work together in the learning process,										
brainstorming method to attract students' attention ac	tivate the thinking strategy according										
to the student's ability	thrate the thinking strategy according										
10. Course Structure											
Dequined Learning Unit of	or Looming										
Week Hours Outcomes subjec	ct Learning Evaluation method										
name											
1 3 Identifying the computer Knowled	ed lecture Daily and monthly exam,										
and its parts, turning the ge	attendance and reports										
computer on/off											
5 Computer parts,	Doily and monthly areas										
input/output units Vnewley	lecture Daily and monthly exam,										
2 input/output units, Knowled	attendance and reports										
2 input/output units, Knowled memory, central ge	attendance and reports										
2input/output units, memory, central processing unitKnowled ge3Central Processing Unit	attendance and reports										
2input/output units, memory, central processing unitKnowled ge3Central Processing Unit (C.P.II), main functions	attendance and reports										
2input/output units, memory, central processing unitKnowled ge3Central Processing Unit (C.P.U), main functions, motherboard (M/B) andKnowled	ed lecture Daily and monthly exam,										
2input/output units, memory, central processing unitKnowled ge3Central Processing Unit (C.P.U), main functions, motherboard (M/B) and how to communicate withKnowled ge	ed lecture Daily and monthly exam, attendance and reports										
2input/output units, memory, central processing unitKnowled ge33Central Processing Unit (C.P.U), main functions, motherboard (M/B) and how to communicate with computer partsKnowled ge	attendance and reports ed lecture Daily and monthly exam, attendance and reports										

					
		(mouse/keyboard), output	ge, skills		attendance and reports
		units (Monitor), memory	and		
		(RAM, ROM)	attitudes		
	3	Secondary memory, hard			
5		disk parts, how to store	knowled	locturo	Daily and monthly exam,
5		information on the disk,	ge	lecture	attendance and reports
		information about the disk			
	3	Introduction to the	Knowled		
6		operating system	ge, skill	laatura	Daily and monthly exam,
0		(Windows), application	and	lecture	attendance and reports
		software	attitude		
7	3	Practical exam (1)	knowled	lecture	Daily and monthly exam,
/			ge		attendance and reports
	3	Windows - use the			
		mouse,			
		minimize/maximiz			
8		e windows - close	knowled	lecture	Daily and monthly exam,
0		windows, close	ge	1000010	attendance and reports
		windows, exit			
		windows			
	3	Moving windows from one			
		place to another,	Knowled		Daily and monthly exam
9		controlling window size	ge, skill	lecture	attendance and reports
		(width/height), taskbar -	0 /		1
		date, time			
	3	Organizing the address list			
		- Copying images and texts			
		- Splitting web pages -			
		Printing web pages -	Knowled		Daily and monthly ayam
10		Search engines - How to	ge, skill	lecture	attendance and reports
		search for information on	8-,		
		the network - Using the			
		search button in the			
		toolbar -			
	3	MY COMPUTER			
		Desktop, Create a			
		shortcut icon for			
11		an application or	Knowled	lecture	Daily and monthly exam,
11		file, Recycle Bin -	ge, skill		attendance and reports
		Window Explorer,			
		Format floppy			
		disks			

12	3	Install files - select/choose folder, create folder - rename, delete file/folder, copy file/folder, move file/folder	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
13	3	Screen settings - screen saver, change mouse cursor - double transfer speed control	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
14	3	Software Installation and Uninstallation, Disk Information, Help Request) HELP	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
15	3	Practical exam (1)	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
11.Co	ourse Ev	aluation					
The gr prepara monthl	ade for tion, par y exams	the semester examination is ticipation, and submitting repor- for each exam (15) grades, and	(40%), di orts, (30) gi l the grade	ivided into rades for mo for the fina	(10) grades for daily onthly exams, with two l exam is (60%).		
Require	ed textbo	boks (curricular books, if any)	Lectures j relevant b	prepared by books and re	the teacher based on ferences.		
Main re	eferences	s (sources)	Basic Prin Al-Wahdi	nciples of Co i/ Fourth Ed	omputers/Magdi Abdulla ition 2019		
Recom (scienti	mended fic journ	books and references als, reports)	Iraqi academic scientific journals, including				
Electro	nic Refe	rences, Websites	Internati	onal journal	ls.		

Course Description Form

1. Cou	ırse Name:
	Mathematics 1
2. Cou	ırse Code:
	MATH112
3. Ser	nester / Year:
	1 st semester / First year /2023-2024
4. Des	scription Preparation Date:
	31/3/2024
5. Ava	ailable Attendance Forms:
6 Nu	Classroom attendant
0. INU	s
7. Co	urse administrator's name (mention all, if more than one name)
Nan	ne: Susan Ibrahim Hassan
Ema	ail: susanih@uokirkuk.edu.iq
8. Coi	urse Objectives
Course	• Acquire the necessary knowledge of the physical object and understand the meanin
Objectives	and whys of each mathematical concept.
	• Apply the steps to solve the mathematical problem by analyzing the problem and
	developing a solution plan.
	• Helping the student learn more about new sciences in the learning environment.
	 It helps develop deductive thinking, reasoning and contemplation skills.
9. Tea	aching and Learning Strategies
Strategy	• Encourage students to participate in the lesson by solving problems and interacting
	with the materials actively.
	• Providing opportunities for students to apply mathematical concepts in real-life
	contexts.
	• Creating inspiring and intriguing mathematical challenges to motivate students and
	encourage them to develop their mathematical skills.
	• Encourage students to work together in groups to solve mathematical problems and
	discuss ideas.
	• Provide immediate and constructive feedback to students on their performance
	understanding of the material.
<u> </u>	

10. Course Structure					
Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation
		Outcomes		method	method
1	2	Understand the basic concepts of real numbers and intervals including natural numbers, integers, decimals, and rational numbers.	Real numbers and intervals	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
2	2	Ability to apply mathematical concepts in solving a variety of problems related to linear and quadratic inequalities	Linear and quadratic inequalities	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
3	2	Ability to apply mathematical concepts in solving a variety of problems related to absolute and fractional inequalities	Absolute and Fractional Inequalities	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
4	2	An ability to accurately draw simple functions and understand the relationship between the equation and form of a function.	Drawing simple functions, incrementing and decreasing functions	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
5	2	Understand mathematical patterns related to even, odd, and symmetrical functions, such as symmetry and symmetry.	Even and odd and conflicting functions, some common functions	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
6	2	An ability to apply trigonometric functions in solving practical and realistic problems.	Trigonometric functions, laws of trigonometric functions	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
7	2	exam			
8	2	Develop the ability to analyze geometrically drawn functions, determine their domains and extent, and understand how value changes affect the shape of a graph.	Domain and range of functions drawn (geometrically)	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
9	2	Learn how to determine the range of variability	Domain and range of functions mathematically	Solving exercises on the board	Student discussion, board

	1				1 / 1
		of a function and the set of values it takes.		with particination	solution, daily exam and
		52 (MARCO 10 MARCO)		of student.	homework
		Understand the basics of the ends of functions and apply it effectively	Find the ends of the	Solving exercises on	solutions. Student discussion, board
10	2	in solving mathematical problems.	functions	the board with participation of student.	solution, daily exam and homework solutions.
11	2	Learn the concept of continuity of functions and know the conditions necessary for a function to be continuous at a certain point or in a specific set of points.	Continuity of functions	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
12	2	Know the derivative in general and understand the mathematical definition of the	Derivation by definition	Solving exercises on the board with	Student discussion, board solution, daily
		derivative.	itive.		exam and homework solutions.
		It helps students understand the laws of derivatives		Solving exercises on	Student discussion,
13	2	practically and enables them to use them efficiently in solving a variety of mathematical problems	Derivative laws	the board with participation of student.	solution, daily exam and homework solutions.
14	2	Knowledge of integration and its importance in mathematics and scientific and engineering applications, including understanding the concept of space under the curve and the area	Integration	Solving exercises on the board with participation of student.	Student discussion, board solution, daily exam and homework solutions.
15	2	between two curves.	Exam		
11 0		valuation		<u> </u>	<u> </u>
					E ((00/)
Daily Exa	im, Parti	cipation and Attendance	ce (5%) + Monthly Exam	(35%) + Final	Exam (60%)
12. Le	earning	and reaching Resol) (77)	
Require	d textbo	oks (curricular books, i	t an Calcul	us by Thomas	
Docom	Main re	hooks and references	Laiculu	s by James Ste	ewart
(so	cientific i	ournals, reports)	Robert V. Hogg. Jose	eph W. McKea	n, and Allen T
El	lectronic	References, Websites	Kha	anAcademy	
			(https://www	v.khanacadem	y.org/)



	Course Description General Geology						
1. Co	urse Na	me:					
		Princi	ple of General (Geology			
2. Co	ourse Co	de:					
2. 00			GEOL113				
3. Se	mester /	Year:					
	• .•	Firs	st semester/ First	t year			
4. De	scription	n Preparation Date:	۲/0٤/2024				
5. Av	ailable A	Attendance Forms:					
			Mandatory				
6. Nu	mber of	Credit Hours (Total) /]	Number of Uni	ts (Total)			
7 Co	urso odi	(כ) H0 ninistrator's name (mer	tion all if mor	units (3)	nomo)		
7. Co Na	me: Dr.	Ali hakeem dohan Email	: Alihakeem @	uokirkuk.ed			
8. Co	ourse Ob	jectives	<u> </u>				
The stu	udy of g	eology enables us to know	ow the types of	soil, its co	omposition, source and		
charact	teristics,	discover the sources and	depths of grou	ndwater, an	d establish agricultural		
canals.	b						
9. Ie Verbal	commun	no Learning Strategies	aing them to wo	rk together	in the learning process		
using	written	communication skills	to increase c	omprehensi	on, as well as the		
brainst	orming r	nethod to attract students	'attention, activ	ate the thinl	king strategy according		
to the s	student's	ability, and conduct scien	ntific visits to ag	ricultural pr	ojects.		
10. Co	purse Sti	ructure		-			
Week	Hours	Required Learning	Unit or	Learning	Evaluation method		
		Introduction to	subject name	memou			
1	F	geology - the concept	111	1	Daily and monthly exam,		
1	5	of its origin and	knowledge	lecture	attendance and reports		
		branches					
2	5	Geological phenomena	knowledge	lecture	Daily and monthly exam, attendance and reports		
		Minerals and their			Daily and monthly exam.		
3	5	classification methods	knowledge	lecture	attendance and reports		
	Weathering: its types Knowledge, Daily and monthly exam						
4	4 5 and its relationship to skills and lecture attendance and reports						
		Soli Iormation Rock cycle in nature	autudes		Daily and monthly even		
5	5	igneous rocks	knowledge	lecture	attendance and reports		
6	5	Sedimentary rocks	Knowledge,	lecture	Daily and monthly exam,		
			skill and		attendance and reports		

			attitude		
7	5	Classification of sedimentary rocks	knowledge	lecture	Daily and monthly exam, attendance and reports
8	5	Classification of Metamorphic rocks	knowledge	lecture	Daily and monthly exam, attendance and reports
9	5	Water cycle: surface water	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
10	5	underground water	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
11	5	Minerals and natural rocks in Iraq	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
12	5	Natural resources survey	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
13	5	The relationship of geology to soil	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
14	5	Rock erosion	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
15	5	Transport and deposition of rocks	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports

11.Course Evaluation

The science of geology is of great importance in agriculture and the environment. It helps in studying soil and determining its chemical, physical and mechanical properties. It is concerned with lands and their components. It also helps in understanding the relationship between the geological characteristics of the soil and the plants that can be grown in it.

Moreover, geology helps uncover natural resources such as groundwater, gemstones, precious metals, oil and natural gas, which is the basis for sustainable agriculture and economic growth anywhere.

Geology also helps in studying natural and geographical areas and sites of environmental influence, and helps in identifying activities.

12.Learning and Teaching Resources	
Paguired textbooks (curricular books, if any)	Lectures prepared by the teacher based on
Required textbooks (curricular books, if any)	relevant books and references.
Main references (sources)	General Geology, written by Dr. Abdul Hadi
Main references (sources)	Al-Sayegh and Dr. Farouk Al-Omari
Decommanded books and references	Iraqi academic scientific journals, including
(acientific icumels, reports,)	Kirkuk University Journal of Agricultural
(scientific journais, reports)	Sciences
Electronic References, Websites	International journals included in Scopus



Course Description Form

1 Cour	Nom o
1. COUL	Animal Production
	rse Code:
PRAN114	
3. Sem	ester / Year:
First Seme	ester / First year
4. Desc	cription Preparation Date:
T • T ± _ T - T 9	
J. Avai	datory
6 Num	ber of Credit Hours (Total) / Number of Units (Total)
5Ho	urs / 3 Unit
7. Cou	rse administrator's name (mention all, if more than one name)
Nam	e: Mohammed Madhi Zinalabidin
Ema	il: mehmetmadhi@uokirkuk.edu.iq
8. Cour	se Objectives
Course Objec	• The student gets to know the basic principles of animal
	production through a brief knowledge of:
	• The course aims to teach the student how to care for farm
	animals as well as carry out field operations
	 Introducing the student to numbering animals, making
	animal records, and providing fodder
	caring for newborn animals
9. Teac	hing and Learning Strategies
Strategy	 Preparing a student with a brief knowledge of the basic principles of animal production through a brief knowledge of: The economic importance of wealth as well as the identification of products, eggs and breeding Sheep, cattle and buffalo.

10. C	ourse S	tructure			
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
1	2	Recognize the	Economic	Lecture,	Oral and
		economic	importance	demonstrations	written
		importance	Livestock and	and interactive	tests, daily
		Livestock and	their	discussion	and monthly
		their	relationship	01300351011	
		relationship	With economic		practical
		with economic	Integration		tests, and
		And the future	And the luture		scientific
		notential	for expanding		reports
		for expanding	livestock		
		livestock	production in		
		production in	this wealth		
		this wealth			
2	2	Identify	Agricultural		
		the location of	animals		
		agricultural anima	(livestock)		
		(livestock)	in the animal		
		in the	kingdom		
2	-	animal kingdom			
3	2	Identifying cows	Cows and buffalo		
		and buffalo -	economic		
		economic	importance -		
		international	Arab and		
		Arab and local	local species		
		species	iocai species		
4	2	Learn about the	Management and		
		management and	care of dairy		
		care of dairy	cows, beef cows		
		cows, beef cows	and dual-		
		and dual-	purpose cows		
_		purpose cows			
5	2	Exam	Exam		
6	2	Getting to know	Economic		
		the buffalo:	importance –		
		economic	origin of the		
		importance –	buttalo –		
		origin of the	istribution in the		

	r			
		buffalo –	world –	
		istribution in the	production	
		world –		
		production		
7	2	Identifying sheep	Sheep and goats -	
		and goats –	methods of	
		methods of	classifying them	
		classifying them	and some	
		and some	international	
		international	types	
		types		
8	2	Identifying local	local species	
		species (sheep an	(sheep and goats)	
		goats) and	and establishing	
		establishing a	a sheep herd	
		sheep herd	· F	
9	2	Identifying	Poultry and its	
		poultry and its	economic	
		economic	importance - and	
		importance - and	the origins from	
		the origins from	which it was	
		which it was	bred - and	
		bred - and	classifying	
		classifying	poultry in the	
		poultry in the	world	
		world		
10	2	Exam	Exam	
11	2	Learn about egg	Egg production	
		production and	and meat	
		meat production	production	
12	2	Learn about	Poultry	
		poultry	management and	
		management and	care - nutrition -	
		care - nutrition -	fodder –	
		fodder –	physiology,	
		physiology,	reproduction	
		reproduction	and artificial	
		and artificial	insemination	
		insemination		
13	2	Identifying	Fertilization,	
		fertilization,	pregnancy and	
		pregnancy and	birth in cows	
			-	

14 2 Learn about field operations in dairy and beef operations in dairy and beef cow fields 15 2 dentify Genetics of farm animals- 15 2 dentify Genetics of farm of farm animals- 14 Genetics of farm animals- Camel horses 15 2 dentify Genetics of farm animals- 15 Camel horses Camel horses Camel horses 16 Genetics of farm animals- (origin - types - Education methods) Education 11. Course Evaluation methods) Education station Education animals animal animals animals animal animals animals animals animals animal						
airy and beef in dairy and beef dairy and beef cow fields 15 2 dentify improvement animals- Genetics of farm Camel horses animals- (origin - types - Camel horses Education (origin - types - Education (aily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references Principles of Animal Production" written by: Dr. Muhammad Ali Makki Electronic	14	2	Learn about field	field operations		
dairy and beef cow fields 15 2 dentify Genetics of farm improvement animals- Camel horses Genetics of farm camel horses camel horses animals- (origin - types - Education (origin - types - Education methods) 11. Course Evaluation Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Principles of Animal Production" written books and references (sources) Recommended books and references (sources) Principles of Animal Production" written by: Dr. Muhammad Ali Makki Electronic References, Websites Dr. Muhammad Ali Makki			operations in	in dairy and bee	f	
Image: cow fields Image: cow fields 15 2 dentify Genetics of farm animals- Image: Genetics of farm animals- Genetics of farm Genetics of farm animals- Camel horses Image: Genetics of farm animals- Genetics of farm Genetics of farm animals- Camel horses Image: Genetics of farm animals- Genetics of farm Genetics of farm animals- Camel horses Image: Genetics of farm animals- Genetics of farm Genetics of types - Education Image: Genetics of types - Education methods) Horses Image: Genetics of types - Education Methods Horses Image: Genetics of typ			dairy and beef	cow fields		
15 2 dentify Genetics of farm animals- Genetics of farm animals- Camel horses (origin - types - Camel horses, Education (origin - types - Education methods) 11. Course Evaluation Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (sources). Dr. Muhammad Ali Makki			cow fields			
improvement Genetics of farm animals- Camel horses (origin - types - Education methods) animals- Camel horses (origin - types - Education methods) 11. Course Evaluation methods) Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (scientific journals, reports) Principles of Animal Production" written by: Dr. Muhammad Ali Makki	15	2	dentify	Genetics of farn	1	
Genetics of farm animals- (origin - types - Camel horses (origin - types - Education (origin - types - Education methods) Education (origin - types - Education methods) 11. Course Evaluation Main references (sources) Image: Source of the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Principles of Animal Production" written by: Dr. Muhammad Ali Makki Recommended books and references (sources) Principles of Animal Makki			improvement	animals-		
animals- Camel horses (origin - types - Education methods) (origin - types - Education methods) 11. Course Evaluation Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (scientific journals, reports) Principles of Animal Production" written by: Dr. Muhammad Ali Makki Electronic References, Websites			Genetics of farm	Camel horses		
Camel horses (origin - types - Education methods) Education methods) 11. Course Evaluation Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (scientific journals, reports) Principles of Animal Production" written by: Dr. Muhammad Ali Makki Electronic References, Websites			animals-	(origin - types -		
Image: style styl			Camel horses	Education		
Education methods) Education 11. Course Evaluation In the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (scientific journals, reports) Electronic References, Websites			(origin - types -	methods)		
methods) methods) 11. Course Evaluation Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (sources) Recommended books and references (sources) Distributing in the score sequence Distributing test books and references (sources) Recommended books and references (sources) Dr. Muhammad Ali Makki Electronic References, Websites			Education			
11. Course Evaluation Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (scientific journals, reports) Electronic References, Websites			methods)			
Distributing the score out of 100 according to the tasks assigned to the student such as daily preparation, daily oral, monthly, or written exams, reports etc 12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (scientific journals, reports) Electronic References, Websites	11.	Course	Evaluation			
12. Learning and Teaching Resources Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (scientific journals, reports) Electronic References, Websites	Distrib daily p	uting the reparatio	e score out of 100 acc on, daily oral, monthly,	cording to the task , or written exams, 1	s assigned to the str eports etc	udent such as
Required textbooks (curricular books, if any) Main references (sources) Recommended books and references (scientific journals, reports) Electronic References, Websites	12.	Learning	g and Teaching Res	ources	-	
Main references (sources) Recommended books and references (scientific journals, reports) Principles of Animal Production" written by: Dr. Muhammad Ali Makki Electronic References, Websites	Require	ed textboo	bks (curricular books, if	any)		
Recommended books and references Principles of Animal Production" (scientific journals, reports) Dr. Muhammad Ali Makki Electronic References, Websites	Main ro	foroncos				
Recommended books and references (scientific journals, reports) Principles of Animal Production" written by: Dr. Muhammad Ali Makki Electronic References, Websites Electronic References, Websites		lerences	(sources)			
(scientific journals, reports) written by: Dr. Muhammad Ali Makki Electronic References, Websites	Recommended books and references			ences Prir	ciples of Animal I	Production"
Dr. Muhammad Ali Makki Electronic References, Websites	(scientific journals, reports)		wri	ten by:		
Electronic References, Websites				Dr.	Muhammad Ali M	akki
	Electro	nic Refere	ences, Websites			

	Course Description Form						
1. Co	1. Course Name:						
			General plant				
2. Co	ourse Co	de:					
		T 7	GEPL115				
3. Se	mester /	Year:	/ 厂 *				
4 De		Fill	st semester/Firs	t year			
4. De	scription	rreparation Date:	28/03/2024				
5 4 1	ailahle /	Attendance Forms	28/03/2024				
J. AV		Attenuance Forms.	Mandatory				
6. Nr	mber of	Credit Hours (Total) /	Number of Uni	ts (Total)			
0. 110		(5) Ho	ours. Number of	$\frac{10}{10}$ (10) $\frac{10}{10}$ (3)			
7. Co	ourse adı	ninistrator's name (mer	ntion all. if mor	e than one	name)		
Na	me:AK	O GHAZI SATTAR	E-mail akoghaz	i@uokirkuk	.edu.iq		
8. Co	ourse Ob	jectives			1		
. The c	course air	ms to introduce the stude	ent to the tissue	structures f	ound in plants and the		
proces	ses that	occur within plants sucl	h as photosynth	esis, catabo	olism and construction		
proces	ses, com	ponents of the plant cell,	types and stages	of cell divis	sion.		
9. Te	aching a	nd Learning Strategies					
Verbal	commur	nication with students, urg	ging them to wo	rk together	in the learning process,		
using	written	communication skills	to increase c	comprehensi	on, as well as the		
brainst	orming n	nethod to attract students	'attention, activ	ate the thin	king strategy according		
to the s	student's	ability, and conduct scien	ntific visits to ag	ricultural pr	ojects.		
10. C	ourse Sti	ructure					
Week	Hours	Required Learning	Unit or	Learning	Evaluation method		
		General introduction	subject name	method	Daily and monthly arom		
1	5	General Introduction	knowledge	lecture	attendance and reports		
2	5	The benefits are economic	1	1	Daily and monthly exam,		
2	5		knowledge	lecture	attendance and reports		
3	5	Pure and mixed forests	knowledge	lecture	Daily and monthly exam,		
_		Selection of species for	Knowladga		attendance and reports		
4	5	afforestation: Selection of local	skills and	lecture	Daily and monthly exam,		
	5	and introduced tree species	attitudes	1000010	attendance and reports		
5	5	Types of forests in the Arab	knowledge	lecture	Daily and monthly exam,		
5	5	world	Kilowiedge		attendance and reports		
6	5	Stages of tree development	Knowledge,	lecture	Daily and monthly exam,		
			attitude	icciuit	attendance and reports		
_	_	Selection of species for			Daily and monthly exam		
7	5	afforestation: Selection of local and introduced tree species	knowledge	lecture	attendance and reports		
8	5	The impact of environmental	knowledge	lecture	Daily and monthly evan		
0	5	factors on forests	KIIOWICUZC	iccuit	Early and monthly exam,		

						attendance and reports
9	5	Division of forest types	Kno	wledge, skill	lecture	Daily and monthly exam, attendance and reports
10	5	Botanical characteristics: forests as a diagnostic factor, plant succession, types of succession	Kno	wledge, skill	lecture	Daily and monthly exam, attendance and reports
11	5	Biological factors: soil revival, competition, parasitism (mechanical and biological), mutual relationships between animals	Kno	nowledge, skill lecture		Daily and monthly exam, attendance and reports
12	5	The most common types of trees in natural forests	Kno	wledge, skill	lecture	Daily and monthly exam, attendance and reports
13	5	Local and introduced trees in forests	Kno	wledge, skill	lecture	Daily and monthly exam, attendance and reports
14	5	The difference between forests in the Arab world and other countries	Kno	wledge, skill	lecture	Daily and monthly exam, attendance and reports
15	5	Practical visits to different forests and observing the effects of living and non-living environmental conditions	Kno	wledge, skill	lecture	Daily and monthly exam, attendance and reports
11.Co	ourse Ev	aluation				
The gr	ade for	the semester examination	on is	(40%), di	ivided into	(10) grades for daily
prepara	tion, par	ticipation, and submitting	g repoi	rts, (30) g	rades for mo	onthly exams, with two
monthl	y exams	for each exam (15) grade	es, and	the grade	for the fina	l exam is (60%).
12.Le	earning a	and Teaching Resources	5	_		
Required textbooks (curricular books, if any)			any)	Lectures prepared by the teacher based on relevant books and references.		
Main re	eferences	s (sources)				
Recom	mended	books and references				
(scienti	fic journ	als, reports)				
Electro	nic Refe	rences, Websites		Internati	onal journal	ls included in Scopus

Course Description Form						
1. Course Name:						
English language 1 / beginner level						
2. Course Code:						
ENGL116						
3. Semester / Year:						
First semester/first year						
4. Description Preparation Date:						
31/03/2024						
5. Available Attendance Forms:						
Mandatory						
6. Number of Credit Hours (Total) / Number of Units (Total)						
1 hour						
7. Course administrator's name (mention all, if more than one name)						
Name: Berevan Qader Omar Email: beree.omer@gmail.com						
8. Course Objectives						
Teaching this curriculum aims to make the student familiar with the English language as an						
international language that help the student get benefits from it in his scientific life widely.						
9. Teaching and Learning Strategies						

It is a semi-integrated curriculum for the beginner level that includes the necessary basics

for learning English language in a simplified way with exercises. It includes nouns, verbs,

interrogatives, adjectives, and adverbs.

10. Course Structure							
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method		
1	1	Introduction to part of speech in English	Knowledge	lecture	Exercise		
2	1	Nouns in English	Knowledge	lecture	Exercise		
3	1	Singular and plural	Knowledge	lecture	Exercise		
4	1	Question words	Knowledge	lecture	Exercise		
5	1	Tense of verbs	Knowledge	lecture	Exercise		
6	1	Present simple for beginner	Knowledge	lecture	Quiz		
7	1	Present continuous for beginner	Knowledge	lecture	Exercise		
8	1	Past simple for beginner	Knowledge	lecture	Exercise		
9	1	Past continuous for beginner	Knowledge	lecture	Exercise		

10	1	adjectives	Knowledge	lecture	quiz			
11	1	Pronouns	Knowledge	lecture	quiz			
12	1	adverbs	Knowledge	lecture	Exercise			
13	1	Adverb of frequency	Knowledge	lecture	Exercise			
14	1	Some & any	Knowledge	lecture	Exercise			
15	1	Modal verbs	Knowledge	lecture	Quiz			
11.Co	11.Course Evaluation							
Semester endeavor (40 marks): 15 marks for the first month exam + 5 marks for quiz								
		15 mark	ts for second mo	second month exam + 5 marks for quiz				
			marks)					
12.Learning and Teaching Resources								
Required textbooks (curricular books, if any)			New hea	dway plus (beginner student book			
Required textbooks (currental books, if any)			written by	written by : john and liz soars				
Main references (sources)			Cambridg	Cambridge press				
Recommended books and references			My Engli	My English library wabsita				
(scienti	ific journ	als, reports)						
Electro	nic Refe	rences, Websites	You tub	You tube and some useful websites				

Course Description Form								
1. Course Name:								
	General Forestry							
2. Co	ourse Co	de:	000117					
3 50	mostor /	Voor	GEFOIT/					
3. Se	mester /		First semester/firs	t vear				
4. De	scriptio	n Preparation Date:		t your				
	<u> </u>		29/03/2024					
5. Av	vailable A	Attendance Forms:						
			Mandatory					
6. Nu	imber of	<u>f Credit Hours (Total</u>) / Number of Un	its (Total)				
		(5)	Hours, Number of	units (3)	\ \			
7. Co	burse ad	ministrator's name (1	nention all, if mol	re than one nan	ne)			
	une:MO	nalviivied alda i A	AII E-mail <u>and</u>	ayattiu@uoktik	<u>uk.edu.iq</u>			
The	course a	ims to familiarize it	tself with the sci	ence of forest	principles and its			
relation	nship wit	th other Gabonese scie	nces	ence of forest	principies and its			
9. Te	aching a	and Learning Strateg	ies					
Verba	l commu	inication with students	and motivation for	or teamwork in t	the learning process			
and us	e of com	munication skills						
10 C	ourse St	ructure						
10. 0		Required						
Week	Hours	Learning	Unit or subject	Learning	Evaluation			
		Outcomes	name	method	method			
		Definitions and terminology	Definitions and terminology for forest	Lecture,	Verbal editorial			
	5		science	presentations	daily and monthly			
1				and	tests and			
				interactive	scientific reports			
	economic importance Forest economic Leaders							
			importance	presentations	Verbal, editorial,			
2	5			and	daily and monthly			
	interactive tests and							
	discussion scientific reports							
		Forest tree development	Forest tree	Lecture,	Verbal aditorial			
			conservation	presentations	daily and monthly			
3	5			and	tests and			
interactive scientific re								
		Forest divisions	Forest divisions:	discussion	T T T T T T			
4	5	1 01051 0111510115	depending on the	Lecture,	Verbal, editorial,			
			shape of the leaves,	presentations	daily and monthly			

			source, methods of multiplication, age, dominant species, purpose of creation, wood type	and interactive discussion	tests and scientific reports
5	5	Distribution of forests	Distribution of the world's forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	deciduous forests	deciduous forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	coniferous forests	coniferous forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	bamboo forests	bamboo forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Iraq's forests	Iraq's natural forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	pure and mixed forests	Iraq's pure and mixed forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	reproduction	Forestry reproduction	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	sexual reproduction	sexual reproduction	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports

13	5	asexual reproduction	asexua Ve	l reproduction getative	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
14	5	nurseries	forest nurseries		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
15	5	forest nurseries	Typ r	es of forest nurseries	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
11.C	11.Course Evaluation						
The grade for the semester examination is (40%), divided into (10) grades for date preparation, participation, and submitting reports, (30) grades for monthly exams, with two monthly exams for each exam (15) grades, and the grade for the final exam is (60%).)) grades for daily aly exams, with two am is (60%).	
12.L	earning	and Teaching Resour	ces				
Required textbooks (curricular books, if any			Lectures prepared by the teacher based on relevant books and references.				
Main references (sources)			General Forestry				
Recom	Recommended books and references						
(scient	(scientific journals, reports)						
Electronic References, Websites			International journals included in Scopus				

Course Description Form								
1. Co	1. Course Name:							
Human	Human rights and democracy							
2. Co	ourse Co	de:						
HUI	RI118							
3. Set	mester /	Year:						
		first sen	nester/first	year				
4. De	scription	n Preparation Date:						
-	•••••	28	3/03/2024					
5. Av	ailable A	Attendance Forms:	andatam					
6 Nu	mbor of	N Crodit Hours (Total) / Num	andatory	te (Total)				
U. 110		(2) Hours. N	Sumber of	$\frac{15(10(a1))}{10(a1)}$				
7. Co	ourse adı	ninistrator's name (mention	all, if mor	e than one	name)			
Na	me:Assi	st Prof. Basira Abdullah Ahme	d Email:	baseraabdull	ah@uokirkuk.edu.iq			
8. Co	urse Ob	jectives						
To m	ake the	student able to recogniz	e human	rights in	internal laws and			
interna	ational c	charters, and to become fan	uliar with	the conce	pt of democracy, the			
variou	s system	s of elections, and the means	of assignin	ng authorit	y			
9. 16 Vorbal	aching a	ind Learning Strategies	hom to wo	rk together	in the learning process			
using	written	communication skills to i	ncrease (omprehensi	on as well as the			
brainst	orming n	nethod to attract students' atter	ntion, activ	ate the think	king strategy according			
to the s	student's	ability.	,					
10. Co	ourse Sti	ructure						
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method			
1	2	The historical stages through which the idea of human rights passed	Knowled ge	lecture	Daily and monthly exam, attendance and reports			
2	2	Humanrights in constitution documents International human rigl documents	Knowled ge	lecture	Daily and monthly exam, attendance and reports			
3	2	Human rights in Islamic la are political and social, a the state's responsibility	Knowled ge	lecture	Daily and monthly exam, attendance and reports			
		guarantee them is positive right to life, the right physical integrity, the right privacy,						
----	---	--	---	---------	--			
4	2	The right to nationality right to abolish slavery a slavery The right to se determination	Knowled ge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports			
5	2	Guarantees to prevent attacks on human rights	knowled ge	lecture	Daily and monthly exam, attendance and reports			
6	2	1-Human rights guarantees in Islamic law	Knowled ge, skill and attitude	lecture	Daily and monthly exam, attendance and reports			
7	2	the right to movement Intellectual rights and freedoms	knowled ge	lecture	Daily and monthly exam, attendance and reports			
8	2	The concept of freedom, the concept of anarchy, the concept of democracy, the historical development of the concept of democracy in the Mesopotamian civilization	knowled ge	lecture	Daily and monthly exam, attendance and reports			
9	2	The pillars of democracy, the basic conditions of the democratic system and its characteristics	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports			
10	2	Features of the democratic system, types democracy	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports			
11	2	Forms of the system: indired democracy, democracy, concept, and manifestations	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports			
12	2	Different systems of election	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports			
13	2	Democracy applications	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports			

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14	2	Civil,society,democratic values and its functions	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports
15	2The report on human rights in Islam comprehended and surpassed all hypothetical 		Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports
11.Co	ourse Ev	aluation			
The gr	rade for	the semester examination is	(40%), d	ivided into	(10) grades for daily
prepara	ation, par	rticipation, and submitting repo	orts, (30) g	rades for mo	onthly exams, with two
monthl	y exams	for each exam (15) grades, and	d the grade	for the fina	l exam is (60%).
12.Le	earning a	and Teaching Resources			
Required textbooks (curricular books, if any)			Lectures prepared by the teacher based on relevant books and references.		
Main references (sources)			Human Rights and Democracy / Dr. Ghassan Karim Maihab, Amiad Zein Al-Abidin Tohm		
Recommended books and references (scientific journals, reports)			Iraqi acad	lemic scient	ific journals, including
Electro	nic Refe	rences. Websites	International journals		

	Course Description Form									
1. Co	1. Course Name:									
			Principles of Statis	tics						
2. Co	urse Co	de:								
			STAT121							
3. Sei	mester /	Year:								
	• •	S	Second semester/ Firs	st year						
4. De	scription	n Preparation Date:	21/02/2024							
	•1 1 1		31/03/2024							
5. AV	allable A	Attendance Forms:	Mandatana							
	mah an af	Cuedit Herry (Tete	Mandatory	(Tatal)						
0. INU	inder of	Theory (2) Hours	$\frac{1}{8}$ Practical – (3) Hou	s (10tal)	cof units (3)					
7 Co	urco odi	ninistrator's name ($\mathbf{x} \text{ Fractical} = (5) \text{ from } \mathbf{x}$	then one n	$\frac{1}{2}$ or units (3)					
7. Cu Na	me• Dr	Salah Jasim Amin	Fmail dr salahiasir		ame)					
	urse Ob	iectives	Eman. dr.salarijasi		suu.iq					
The co	urse aim	s to introduce studer	ts to the principles	of statistics	and its types how to					
display	display tables and graphical representation of data as well as to identify the most important									
statistic	cal metho	ods used (measures of	of central tendency	and dispersi	on. etc.) and to make					
the stu	dent able	to use different stat	istical methods corre	ctly to solve	e statistical problems,					
as well	as to ana	alyze data statistically	7	5	L /					
9. Te	aching a	nd Learning Strateg	vies							
Explan	ation and	l clarification								
lecture	method									
student	groups.									
10. Co	ourse Sti	ructure								
		Required		T						
Week	Hours	Learning	Unit or subject	Learning	Evaluation method					
		Outcomes	name	methoa						
			Introduction to							
1	5	knowledge	statistics, its	lecture	Exam					
		-	divisions							
	The nature of									
2	5	knowledge statistical data and lecture Exam								
	symbols									
2	F	1 1 1 0 1 11	Tabular display and	1 /	Г					
5	5	Knowledge & skills	graphical	lecture	Exam					
			Tabular display and							
4	5	Knowledge & skills	graphical	lecture	Exam					
			representation							

5	5	Knowledge & skills	measures tendency mean an mean) for data and	measures of central tendency (arithmetic mean and harmonic mean) for ungrouped data and classified data		Exam
6	5	Knowledge & skills	measures tendenc mode) for data and	measures of central tendency (median, mode) for ungrouped data and classified		Exam
7	5	Knowledge & skills	measures tendency mean, sq for ungr and class	s of central (geometric uare mean) ouped data sified data	lecture	Exam
8	5	Knowledge & skills	Measures disp (rang dev	of absolute persion e, mean iation)	lecture	Exam
9	5	Knowledge & skills	Measures disp (varianc dev	Measures of absolute dispersion (variance, standard deviation)		Exam
10	5	Knowledge & skills	Measures disp (coeff vari	s of relative ersion: ficient of fation)	lecture	Exam
11	5	Knowledge & skills	Torsion and oblat	measures te measures	lecture	Exam
12	5	Knowledge & skills	Hypothe	esis testing	lecture	Exam
13	5	Knowledge & skills	t dist	ribution	lecture	Exam
14	5	Knowledge & skills	Chi- distr	square	lecture	Exam
15	5	Knowledge & skills	Simple and co	regression prrelation	lecture	Exam
11.Co	ourse Ev	aluation				
The gra participa grade fo	de for thation, and r the final	ne semester examination submitting reports, (30) exam is (60%).	n is $(40\overline{\%})$ grades for), divided int r monthly exa	to (10) grade ams, with two	s for daily preparation, monthly exams and the
12.Le	arning	and Teaching Resou	rces			
Required textbooks (curricular books, if any)				Introduction Mahmoud A	to Statistics, v 1-Rawi (1989)	vritten by Dr. Khasha
Main r	Main references (sources)			Introductio Prof. Dr. M	on to descrip Iuhammad A	tive statistics, written b Ahmed Shalabi
Recommended books and references (scientific journals, reports)				Iraqi academic scientific journals		
Electro	nic Refe	erences, Websites		Different sites on the Internet		

Course Description Form

1. Course Name:

Agricultural Economic Principles

2. Course Code:

GEEC122

3. Semester / Year:

Second semester/ First year

4. Description Preparation Date:

28/03/2024

5. Available Attendance Forms:

Mandatory

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

(2) Hours, Number of units (2)

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

Name: Prof. Dr. khattab Abdullah Mohammed Email: khattab1981@uokirkuk.edu.iq

8. Course Objectives

The course aims to raise the level of students' knowledge about general concepts in the economy in general and its types, economic systems and the importance of the agricultural sector among other economic sectors, identifying the most important problems facing it and ways to reduce them, and displaying and marketing agricultural commodities.

9. Teaching and Learning Strategies

Verbal communication with students, urging them to work together in the learning process, using written communication skills to increase comprehension, as well as the brainstorming method to attract students' attention, activate the thinking strategy according to the student's ability, and conduct scientific visits to agricultural projects.

10. Co	ourse Sti	ructure			
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	General concepts in economics	knowledge	lecture	Daily and monthly exam, attendance and reports
2	2	Types of economy, economic systems, productive resources	knowledge	lecture	Daily and monthly exam, attendance and reports
3	2	The importance of the agricultural sector	knowledge	lecture	Daily and monthly exam, attendance and reports
4	2	Economic characteristics of contemporary agriculture	Knowledge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports
5	2	Risk and uncertainty in agricultural work	knowledge	lecture	Daily and monthly exam, attendance and reports
6	2	Production function	Knowledge,	lecture	Daily and monthly exam,

			s	kill and		attendance and reports
		Demand for	3	ittitude		
7	2	agricultural commodities and its types	kn	owledge	lecture	Daily and monthly exam, attendance and reports
8	2	Factors affecting demand for agricultural commodities	kn	owledge	lecture	Daily and monthly exam, attendance and reports
9	2	Elasticity of demand and its types	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
10	2	Display agricultural commodities	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
11	2	Factors affecting the supply of agricultural commodities	Knowledge, skill		lecture	Daily and monthly exam, attendance and reports
12	2	Flexibility of supply and its types	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
13	2	Agricultural production function	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
14	2	Economic problems: unemployment	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
15	2	Economic problems: inflation	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
11.Co	ourse Ev	aluation				
The gr prepara monthl	ade for ation, par y exams	the semester examination ticipation, and submitting for each exam (15) grade	on is g repo es, and	(40%), d orts, (30) g d the grade	ivided into rades for mo for the fina	(10) grades for daily onthly exams, with two l exam is (60%).
12.Le	earning a	and Teaching Resources	5			
Required textbooks (curricular books, if any)			Lectures prelevant b	prepared by books and re	the teacher based on ferences.	
Main references (sources)			Principles by Ali Jac	Principles of Agricultural Economics, written by Ali Jadoua Al-Sharaf		
Recom (scient	mended ific journ	books and references als, reports)		Iraqi acac Kirkuk U Sciences	lemic scient niversity Jo	ific journals, including urnal of Agricultural
Electro	nic Refe	rences, Websites		International journals included in Scopus		



1 Name of P	1 Nome of Departour									
2 Symbol of	decision	Organic chemistry								
		0RCH123								
3. Chapter/ye	ar									
	Se	cond semester/First	year							
4. Date of pre	paration of th	is description								
		28/03/2024								
5. Forms of p	resence availa	able								
		Mandatory	- D							
6. Number of	hours (total)/	number of units (to	tal)		<i></i>					
(5) hours of number of u	(2) hours for t units (3)	he theoretical part ar	nd (3) hours for	r the pra	ictical pa					
7. Name of th	e course adm	inistrator (if more th	nan one name	is ment	ioned)					
Name: M.; Memo	rial of Ahmad H	lassan e-mail: thikra.	ahmed@uokirl	kuk.edu.	iq					
8. Objectives	of the decisio	n in in in in in								
physical constant others and knowle and how to separ compound by co theoretical aspect ** Knowledge of t 9. Teaching a 1- describe such as the ** And boilin 3 - Study and ide	 Organic chemistry of the second stage deals with the study and determination of physical constants of organic compounds such as the degree of fusion, boiling and others and knowledge of how to purify the organic compound by laboratory methods and how to separate compounds from each other and detect the unknown organic compound by color methods has been interacted between the practical and theoretical aspect of the student to benefit from the greatest amount of information ** Knowledge of this area 9. Teaching and learning strategies 1- describe methods of assigning physical constants to organic compounds such as the degree of fusion ** And boiling. 2- Describe the general methods of purification 									
compound					.10					
Method of assessment	Method of assessmentWay of learningName of unit or subjectRequired learningHour sThe week									
Daily and monthly	aily and monthly Definition of organic									
and reports		chemistry, its								
	Lecture	importance and the	Knowledge	5	1					
		types of interactions								
		used in it								

Daily and monthly		Study of alkane-			
and reports	Leeture	saturated		-	0
	Lecture	hydrocarbon	Knowledge	5	Ζ
		compounds			
Daily and monthly		Study of			
and reports	Lesture	unsaturated alkene	Ka anda da a	_	0
	Lecture	hydrocarbon	Knowledge	5	3
		compounds			
Daily and monthly		Study of saturated			
and reports	Student	and unsaturated	Knowledge	_	4
	groups	hydrocarbon	and skill	5	4
		compounds			
Daily and monthly		Study of non-			
and reports	The lecture	alkene hydrocarbon	Knowledge	5	5
		compounds			
Daily and monthly		Study of aromatic			
and reports	Lecture	hydrocarbon	Knowledge and skill	5	6
		compounds			
Daily and monthly		The first month		_	7
and reports	Lecture	exam	Knowledge	5	1
Daily and monthly		** Alcohol and			
and reports	Lecture	methods of	Knowledge	5	8
		preparation			
Daily and monthly		** Phenols have			
and reports		their properties and	Knowledge	F	0
	Lecture	methods of	and skill	5	9
		preparation			
Daily and monthly	1 ture	Reactions of alcohol	Knowledge	F	40
and reports	Lecture	and phenols	and skill	5	10

[]		1	1			
Daily and monthly		Aldehydes have				
and reports	-	their properties and	Knowledge	_		
	I ne lecture	methods of	and skill	5	11	
		preparation				
Daily and monthly		Ketones have their				
and reports		properties, methods				
		of preparation and	Knowledge	_	10	
	Lecture	reactions of	and skill	5	12	
		aldehydes and				
		ketones				
Daily and monthly		Second month	Knowledge	-	40	
and reports	Lecture	exam	and skill	5	13	
Daily and monthly		Carboxylic acids				
and reports	Lecture	have their properties	Knowledge and skill	5		
		and methods of			14	
		preparation				
Daily and monthly		The Secretary and	Knowledge	_	4.5	
and reports	Lecture	the effective group	and skill	5	15	
11. Evaluation	of the decisio	n				
Quarterly pursuit	score of (40	%) distributed (10)	scores for dat	ily prepa	aration,	
exam (15) score,	and the final e	(30) monthly exam sc xam score of (60%)			ins per	
12. Sources of	learning and	teaching				
Lectures prepared	d by the teache	er based on the	Required bool	ks if any i		
relevant books an	a references.	hmad Fathi Savad	(methodology	, if any)		
Ahmed	Filicipal Telei	ences (a	sources)			
Iragi academic so	Recommende	d books	and			
Journal of Kirkuk	University of S	supporting ref	erences	orts)		
International mag	azinae within t	Electronic refe	erences,	Internet		
international magazines within the Scopas absorbers sites						
	Model d	escription of the de	cision			

Course Description Form 1. Course Name: Principles of Plant Anatomy 2. Course Code: PLMO124 3. Semester / Year: Second semester/First year 4. Description Preparation Date: 28/03/2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) (5) Hours, Number of units (3) 7. Course administrator's name (mention all, if more than one name) Name: Assist. Prof. Dr. Mateen Yilmaz Izaldin Al-Bayati **Email:** uk mateen@uokirkuk.edu.iq 8. Course Objectives The course aims to teach the student anatomy, its branches, and its relationship to other sciences such as plant diseases, physiology, environment, and others. The student also learns about the very precise specifications and precise classification of medicinal plants used in the manufacture of drugs, food, fibers, wood, etc. 9. Teaching and Learning Strategies Teaching the student how to dissect a plant and explain its organs, tissues, and cells, the function of each of them, and their relationship to each other. **10.** Course Structure **Required Learning** Unit or Learning Week Hours **Evaluation method** subject name Outcomes method The apparent appearance of the plant Daily and monthly exam, - the root system (its 1 5 knowledge lecture attendance and reports types, functions, and modifications) Stem (types, functions, Daily and monthly exam, 2 5 mutations. knowledge lecture attendance and reports distribution) - buds Papers (types, functions. Daily and monthly exam, 3 5 knowledge lecture attendance and reports Its modifications. distribution) Meristematic tissues Knowledge Daily and monthly exam, (types and locations). 4 5 lecture and skills attendance and reports Their presence in

		plants and their			
		functions)			
5	5	(types, locations, and most important features)	knowledge	lecture	Daily and monthly exam, attendance and reports
6	5	Secretory structures (types, functions and environmental importance)	Knowledge and skills	lecture	Daily and monthly exam, attendance and reports
7	5	Epidermal tissue (epidermal cells and stomata)	knowledge	lecture	Daily and monthly exam, attendance and reports
8	5	Xylem and phloem - vascular bundle and its types	knowledge	lecture	Daily and monthly exam, attendance and reports
9	5	The anatomical structure of the root of a young monocot and dicotyledonous plant - The anatomical structure of the root of an old plant	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
10	5	The anatomical structure of the root of a young monocot and dicotyledonous plant - The anatomical structure of the stem of an old monocot and dicotyledonous plant	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
11	5	Growth rings	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
12	5	Sapwood and hardwood	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
13	5	Vascular connection between the root and the stem	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
14	5	Vascular cambium (cambium cell structure, cambium activity, cork cambium and formation of prederm, protective	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports

		tissue in plants, wound				
		cork and lenticels)				
		The anatomical				
15	5	structure of a monocot	Kn	Knowledge, skill	lecture	Daily and monthly exam,
15	5	leaf and a dicot leaf -				attendance and reports
		defoliation				
11.Co	ourse Ev	aluation				
The grade for the semester examination is				(40%), di	ivided into	(10) grades for daily
prepara	tion, par	ticipation, and submitting	g repo	orts, (30) gi	rades for mo	onthly exams, with two
monthl	y exams	for each exam (15) grade	s, and	d the grade	for the fina	l exam is (60%).
12.Le	arning a	and Teaching Resources	}			
Doguin	ad towth	oles (aumigular booles if	(11 0	Lectures prepared by the teacher based on		
Require		ooks (cufficular books, II a	any)	relevant books and references.		
Main re	eferences	s (sources)		Basics of	plant Anato	omy
Decommon ded heelts and references			Iraqi acad	lemic scient	ific journals, including	
(acientific issues)			Kirkuk University Journal of Agricultural			
(scientific journals, reports)		Sciences				
Electro	nic Refe	rences, Websites		Internati	onal journal	ls included in Scopus

Course Description Plane surveying									
1. Co	1. Course Name:								
			Surveying						
2. Co	urse Co	de:							
			SURV125						
3. Se	mester /	Year:							
		Seco	ond semester/firs	st year					
4. De	scription	n Preparation Date:							
			۲/0٤/2024						
5. Av	ailable A	Attendance Forms:							
			Mandatory						
6. Nu	mber of	Credit Hours (Total) /]	Number of Uni	ts (Total)					
		(5) Ho	urs, Number of	units (3)					
7. Co	urse adı	ninistrator's name (mer	ntion all, if mor	e than one	name)				
Na	me: Dr.	Ali hakeem dohan Email	: Alihakeem @	uokirkuk.ed	<u>lu.iq</u>				
8. Co	urse Ob	jectives							
the abi Introduction Theodoc works, for adv student that he Giving tools, a Introduction Using to Calcula 9. Te Verbal using brainst to the s	 8. Course Objectives Introducing the student to the general basics of surveying and preparing him so that he has the ability to manage surveying technicians and engineers working on civil projects. Introducing the student to using some surveying devices, such as the Level device and the Theodolite device, so that he can perform the simple surveying work he needs in civil works, such as measuring levels or measuring a specific angle. Giving the student priorities for advanced surveys, such as surveying roads and measuring coordinates. This enables the student, if he wishes, to develop his capabilities in the future through courses or study so that he can be a professional surveyor and perform advanced surveying work. Giving the student the basic principles of surveying, training him on the use of surveying tools, and acquiring the following skills: Introduction to various surveying sciences Using modern surveying equipment to obtain meteorology Calculating coordinates and determining locations 9. Teaching and Learning Strategies Verbal communication with students, urging them to work together in the learning process, using written communication skills to increase comprehension, as well as the 								
$\frac{10}{10} C$	ourse St	admity, and conduct seler	time visits to ag	ncununai pi					
10. C		Required Learning	L'nit or	Learning					
Week	Hours	Outcomes	subject name	method	Evaluation method				
1	5	Definition of space, its types, branches and how it develops	knowledge	lecture	Daily and monthly exam, attendance and reports				
2	5	Basic principles of space Units of measurement	knowledge	lecture	Daily and monthly exam, attendance and reports				

		(its parts, multiples)				
3	5	scale, (types, methods of application)	knowledge	lecture	Daily and monthly exam, attendance and reports	
4	5	Surveying using the measuring wheel (on the map and on the ground)	Knowledge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports	
5	5	Longitudinal measurements and longitudinal measuring tools	knowledge	lecture	Daily and monthly exam, attendance and reports	
6	5	Scanning with tape	Knowledge, skill and attitude	lecture	Daily and monthly exam, attendance and reports	
7	5	Cadastral errors, their types and sources	knowledge	lecture	Daily and monthly exam, attendance and reports	
8	5	Methods for measuring horizontal distances directly Knowing the obstacles that prevent measurement	knowledge	lecture	Daily and monthly exam, attendance and reports	
9	5	Methods of dropping columns	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports	
10	5	Methods of indirect measurement through a device Settlement	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports	
11	5	Distance whiskers method and shadow method	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports	
12	5	Anvar method	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports	
13	5	Settlement methods	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports	
14	5	Topographical area	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports	
15	5	Application of measuring distances using theodolite	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports	
11. Course Evaluation						

The goals can be summarized through the following points:1. Establishing the required locations on the ground based on known points2. Identify and determine the locations of agricultural lands and their heights above sea level

. 3. Finding land areas according to their types directly or through maps

. 4. Giving an idea about water resources and their distance from agricultural lands

. 5. Assist in designing irrigation and drainage networks and constructing dams and water tanks

6. Planning the locations of agricultural roads of all types and the boundaries of forest divisions

7. Determine the types and densities of vegetation cover in different areas using aerial photographs and remote sensing methods

8. Providing the necessary information for constructing agricultural buildings

9. Providing the necessary information for making contour lines, terraces, and corrugations on slopes

10. Assist in determining the boundaries of soil units when classifying lands.

12.Learning and Teaching Resources	
Required textbooks (curricular books, if any)	Lectures prepared by the teacher based on
Required textbooks (curricular books, if any)	relevant books and references.
Main references (sources)	Principle of plane and Topographic Surveying
Main Terefences (sources)	written by Dr. Riad Saleh Al-Khafaf
Decommended books and references	Iraqi academic scientific journals, including
(acientific journals, reports,)	Kirkuk University Journal of Agricultural
(scientific journais, reports)	Sciences
Electronic References, Websites	International journals included in Scopus
Main references (sources) Recommended books and references (scientific journals, reports) Electronic References, Websites	Principle of plane and Topographic Surveying written by Dr. Riad Saleh Al-Khafaf Iraqi academic scientific journals, including Kirkuk University Journal of Agricultural Sciences International journals included in Scopus

Course Description Form						
1. Co	urse Na	me:				
Compu	iter/2					
2. Ĉo	urse Co	de:				
CO	MP126	X 7				
3. Sei	mester /	Year:	mostor/fire	at voor		
4 . De	scrintio	n Prenaration Date:		st year		
	scription	28	3/03/2024			
5. Av	ailable A	Attendance Forms:				
		N	Iandatory			
6. Nu	mber of	Credit Hours (Total) / Num	ber of Uni	ts (Total)		
		(3) Hours, f	Number of	units (1)		
7. C0 Na	urse adi mo·Assi	ninistrator's name (mention st Prof. Basira Abdullah Ahme	all, II Mor	baseraabdul	name)	
	urse Ob	iectives			ane uokirkuk.cuu.iq	
Develo	ping the	e student's abilities to maste	r making	tables and	writing mathematical	
equati	ons via t	the computer	0		5	
О То	achina a	nd Learning Strategies				
Verbal	commur	nication with students, urging t	them to wo	rk together	in the learning process.	
using	written	communication skills to	increase c	comprehensi	on, as well as the	
brainst	orming r	nethod to attract students' atter	ntion, activ	ate the thinl	king strategy according	
to the s	student's	ability.				
10. Co	burse Sti	ructure	Unit or			
Week	Hours	Required Learning Outcomes	subject name	Learning method	Evaluation method	
1	3	Run Microsoft Word - open a new document - save the working page - make a backup copy - close a file - open a stored file	Knowled	lecture	Daily and monthly exam, attendance and reports	
2	3	Inverting the language between Latin and Arabic - preparing an Arabic and Latin paragraph - preview before printing - printing the worksheet - specifying the text - font and size -	Knowled ge	lecture	Daily and monthly exam, attendance and reports	

		underlining - changing letter case			
3	3	Moving and copying information - Word clipboard - Search and replace - Numbers and bullets - Spell checker - Undo - Reverse undo - Page setup - Page margins - Text alignment - Line spacing	Knowled ge	lecture	Daily and monthly exam, attendance and reports
4	3	Inserting a table - Inserting rows and columns - Selecting the row/column - Selecting the table - Adding borders and deleting cells - Shading the frame	Knowled ge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports
5	3	Merge and split cells - Split the table - Change the height and width of cells - Auto fit - Repeat the table title - Header and footer - Sorting text	knowled ge	lecture	Daily and monthly exam, attendance and reports
6	3	Page numbering - writing code - toolbar - drawing - deleting drawing shapes - filling - drawing line color - inserting, editing, deleting and moving the image	Knowled ge, skill and attitude	lecture	Daily and monthly exam, attendance and reports
7	3	Microsoft Excel: Run it - Excel worksheet - Enter data - Save the file - Print the worksheet - Exit the program	knowled ge	lecture	Daily and monthly exam, attendance and reports
8	3	Practical exam	knowled ge	lecture	Daily and monthly exam, attendance and reports
9	3	Selecting cells - types of data - using mathematical formulas to select data - relative and	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports

		absolute addresses					
		- formulas that					
		produce error					
		values - moving					
		cells - copying data					
		Move or copy a worksheet					
		and replace - move to a					
		cell - delete cells -					
		erase/insert a row or					
		column					
	3	Organizing the address list					
		- Copying images and texts					
		- Splitting web pages -					
		Printing web pages -					
10		Search engines - How to	Knowled	lecture	Daily and monthly exam,		
		search for information on	ge, skin		attendance and reports		
		the network - Using the					
		search button in the					
		toolbar -					
	3	Modify the height of					
		a row or column -	T 7 1 1				
11		show and hide the	Knowled	lecture	Daily and monthly exam,		
		row or column	ge, skill		attendance and reports		
12	3	Rename the worksheet -	Knowled	lecture	Daily and monthly exam,		
12		font type, size and style	ge, skill	lecture	attendance and reports		
13	3	Shape numbers - align	Knowled	lecture	Daily and monthly exam,		
15		data - add borders	ge, skill	lecture	attendance and reports		
	3	Fill cells - sort data -	Knowlad		Daily and monthly ayam		
14		create a chart	ge skill	lecture	attendance and reports		
			5 0, 51111		autoriaurice una reports		
	3	Edit Created					
		Layout -					
		Header/Footer					
15		Insert and	Knowled	lecture	Daily and monthly exam,		
10		remove a page	ge, skill	locture	attendance and reports		
		break					
11.Co	ourse Ev	aluation	(1001) 1	• • • • •			
The gr	ade for	the semester examination is	(40%), d	ivided into	(10) grades for daily		
prepara	ation, pai	for each even (15) and submitting repo	orts, (30) g	for the firm	onthis exams, with two 1 even is $\langle (00) \rangle$		
monthl	y exams	for each exam (15) grades, and	u the grade	for the fina	1 exam 1s (60%).		

12.Learning and Teaching Resources		
Paguired textbooks (curricular books, if any)	Lectures prepared by the teacher based on	
Required textbooks (curricular books, if any)	relevant books and references.	
	Computer basics and office applications (Part	
Main references (sources)	second) / Ziad Muhammad Aboudi, Ghassan	
	Hamid Abdel Majeed, Mustafa Diaa Al-Hass	
Recommended books and references	Iragi agadamia agiantifia journala including	
(scientific journals, reports)	fraqi acadefilic scientific journais, fiicidding	
Electronic References, Websites	International journals.	

Course Description Form

	Course Description Form					
1. Course	e Name:					
Engineering	g drawing					
2. Course	e Code:					
GEDR127						
3. Semes	3. Semester / Year:					
second sem	ester /first year					
4. Descri	ption Preparation Date:					
31/3/2024						
5. Availa	ble Attendance Forms:					
Is man	idatory					
6. Numbe	er of Credit Hours (Total) / Num	ber of Units (Total)				
((3) hours f	or the practical part, number o	of units (^Y)				
7. Cours	e administrator's name (ment	tion all, if more than one name)				
Name:	MA-NIHAYAT HUSSEIN AMER	EN				
Email:	mnas_int@uokirkuk.edu.iq					
8. Course	e Objectives					
Course Objectiv	/es	 Introducing a student to general concepts and definitions in drawing. Engineering drawing is considered a language with rules and foundation that can only be practiced by those who have studied it properly. The extent of achievement i depends on practice and complete accuracy. Introduce the student to the basics of dimensi and basic measurements Skill objectives for introducing the student to avamples of dimensional measurements and provide the student to 				
9. Teachi	ng and Learning Strategies	and engineering design.				
Strategy Understand all the engineering properties of an entity or product in a clear correct manner. Through education and full knowledge of the basics and scientific engineering concepts. 2- Presenting questions about the topic to demonstrate students' understanding through their answers 3- Conducting daily and monthly exams, preparing practical reports, and d descriptive homework assignments						

10. Co	ourse S	tructure			
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
١	3	Lectures + exercises	. historical overview of	Lectures +	Daily questions
		and practical	the science of	applications and	+ tests
		observations	engineering drawing and	drawings	
			its principles		
			Definitions and		
			explanation of scientific		
			terms		
۲	3	Lectures + exercises	Representing objects by	Lectures +	Daily questions
		and practical	reducing and enlarging	applications and	+ tests
		observations	measurements	drawings	
			Examples of scale		
			operations		
٣	3	Lectures + exercises	Modern and basic multi-	Lectures +	Daily questions
		and practical	purpose drawing tools	applications and	+ tests
		observations	Basics of using tools	drawings	
£	3	Lectures + exercises	Identify the types of	Lectures +	Daily questions
		and practical	lines used in	applications and	+ tests
		observations	engineering drawings,	drawings	
			the rules for		
			implementing them,		
			arranging the drawing		
			paper and data table,		
			and writing numbers and		
			letters		
٥	3	Lectures + exercises	Engineering operations	Lectures +	Daily questions
		and practical	(dividing lines and	applications and	+ tests
		observations	erecting columns), direct	drawings	
			drawings, connecting		
			future lines, arcs, and		
			tangents		
			Examples and drawings		~
٦	3	Lectures + exercises	Regular polygons,	Lectures +	Daily questions
		and practical	parabolas and ellipses	applications and	1 10515
		observations	Examples and drawings	drawings	
Y	3	Lectures + exercises		Lectures +	Daily questions + tests
		and practical	Examination	applications and	1 10515
		observations		drawings	
^	3	Lectures + exercises	Projective	Lectures +	Daily questions
		and practical	drawing/drawing	applications and	1 10315
		observations	-, -, -, -, -, -, -, -, -, -, -, -, -, -	drawings	

			section	s parallel to basic		
	_		levels			D 11
٩	3	Lectures + exercises	Determ	ine the position	Lectures +	Daily questions + tests
		and practical	of the c	lrop on the plate	applications and	1 6565
		observations	Exampl	es and drawings	drawings	D. il
۱.	3	Lectures + exercises	(Interse	ctions in	Lectures +	+ tests
		and practical	projecti	ons)	applications and	
	2					Daily questions
11	3	and practical	Basic	rules for setting	applications and	+ tests
		observations		dimensions	drawings	
	3	Lectures + exercises			Lectures +	Daily questions
11	5	and practical	Geome	tric perspective -	applications and	+ tests
		observations	xom	etric projection	drawings	
٠, ٣	3	Lectures + exercises			Lectures +	Daily questions
.,		and practical	Sec	tional projections	applications and	+ tests
		observations			drawings	
١٤	3	Lectures + exercises	Dulas	a daaraha a	Lectures +	Daily questions
		and practical	Rules f	or drawing	applications and	+ tests
		observations	enginee	ering sectors	drawings	
10	3	Lectures + exercises			Lectures +	Daily questions
		and practical	I	Examination	applications and	+ tests
		observations			drawings	
11.Co	ourse Evalua	tion				
Da	ily and mon	thly tests				
Pa	urticinate hv	asking questions and q	nenina	scientific discu	ssions related to	the academic
1 4			pering			
SU	bject					
Stu	udent activiti	es through research, r	eports,	and home and	class assignmer	nts
An	d illustration	s related to the study	materia	I		
12.	Learning a	nd Teaching Resou	irces			
Require	d textbooks	(curricular books, if an	iy)	Introduction to	engineering dra	wing for studen
			- /	of the College of Agriculture - Dr. Spokesman		
				Sabri Hassan.	Mosul Universit	y Press
Main ret	ferences (so	urces)		The Int	ernet in general	
Recommended books and references (scientific Messages and theses, ancient and m					ncient and mode	
journals	, reports)					
Electron	nic Reference	es, Websites		Iraqi ac	ademic journals	, Research gate,



Course Description Form							
1. Co	1. Course Name:						
			Forest Dendrolo	ogy			
2. Co	ourse Co	de:					
2 0		T 7	FOEN224				
3. Se	mester /	Year:	1				
1 Dc	corintio	n Propagation Data:	econd semester/sec	ond year			
4. De	scriptio	n r reparation Date.	29/03/2024				
5. Av	vailable /	Attendance Forms:	2710372024				
			Mandatory				
6. Nu	umber of	f Credit Hours (Total) / Number of Un	its (Total)			
		(5)	Hours, Number of	funits (3)			
7. Co	ourse ad	ministrator's name (1	mention all, if mo	re than one nan	ne)		
Na	me:MO	HAMMED ALBAYA	ATI E-mail <u>alb</u>	ayatiiu@uokirk	uk.edu.iq		
8. Co	ourse Ob	ojectives					
0 T ₂	h		•~~				
9. 16	acning a	ind Learning Strateg	ies	r toomwork in t	the learning process		
and us	e of com	munication skills			the learning process		
10. C	ourse St	ructure					
Week	Hours	Required Learning	Unit or subject name	Learning method	Evaluation method		
		Outcomes Foundations of	Foundations of	Lactura			
		roundations of veganism	veganism and	presentations	Verbal, editorial,		
1	5	vegamism	some	and	daily and monthly		
			partitioning	interactive	tests and		
			terminology	discussion	scientific reports		
		Objectives of Plant	Objectives of	Lecture,	Verbal editorial		
		Division	Plant Division	presentations	daily and monthly		
2	5		Science and its	and	tests and		
			Relationship to	interactive	scientific reports		
		Listoriaal Drafila	Uther Science	discussion	1		
		nistorical Profile	Profile of	presentations	Verbal, editorial,		
3	5		Veganism	and	daily and monthly		
			, eguinisin	interactive	tests and		
discussion scientific reports							
		Foundations of	Foundations of	Lecture,	Verbal, editorial,		
4	5	plant development	plant	presentations	daily and monthly		
			development	and	tests and		

			and basic trends of development	interactive discussion	scientific reports
5	5	classification mattresses	Large and small classification mattresses	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	Principles of Plant	Principles of Plant Designation for Forest Tree	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	Common classification	Common classification systems in the world	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	Plant Diagnosis	Plant Diagnosis of Forest Tree	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Qualities, classification	Qualities, classification manuals and types	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Certified qualities	Certified qualities in plant classification	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	Basic classification	Basic classification principles for tree parts	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	Classification of the Kingdom's	Classification of the Kingdom's plant and forest location	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
13	5	gymnosperms	gymnosperms	Lecture,	Verbal, editorial,

				presentations	daily and monthly	
				and	tests and	
				interactive	scientific reports	
				discussion		
14	5	angiosperms	angiosperms	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
		Global Forest Tree	Global Forest	Lecture,	Varbal aditorial	
		Classification	Tree	presentations	daily and monthly	
15	5		Classification	and	tests and	
			Keys	interactive	scientific reports	
11.0		1		discussion		
11.C	ourse Ev		(100()	1 1 1	\rightarrow 1 C 1 1	
The g	rade for	the semester examination of the semester examination of the semester is the second sec	(40%), (40%), (10%)	divided into (10)) grades for daily	
prepara	ation, pai	for each even (15) gr	adas and the grad	grades for montr	in two (60%)	
		nd Tapahing Pasour			am 18 (00%).	
12.1.0	ear ning a	and Teaching Resour	L octuros p	reported by the ta	achar based on	
Required textbooks (curricular books, if any			, if any relevant bo	relevant books and references.		
Main references (sources)			Forest Der	Forest Dendrology		
Recommended books and references						
(scient	ific jourr	nals, reports)				
Electro	onic Refe	erences, Websites	Internatio	nal journals incl	uded in Scopus	

1. Name of Rapporteur									
Biochemistry									
2. Decision code									
3 Chanter/vear	BICH212								
J. Chapter/year	Sec	ondvear/ first semest	er						
4. Date of prepar	ation of this d	escription	<u>.</u>						
		28/03/2024							
5. Forms of pres	ence available	•							
		Mandatory							
6. Number of hours	urs (total)/ nur	nber of units (total)	e for the practi	<u>cal part</u>	numbo				
(3) nours of (2) nours units (3)		ical part and (3) nour	s for the practi	cai part,	Humbe				
7. Name of the co	ourse adminis	trator (if more than	one name is r	nention	ed)				
Name: Mohammed A	bdul Aziz Late	ef email: mahammda	zyz@uokirkuk.	edu.iq					
8. Objectives of t	the decision				1 2 1 1				
** Have an understand	ing of the basic	topics in biochemistry a	and their applica	tions in t	he field				
9 Teaching and	learning strate	age of the different axe	s of chemistry.	mical					
knowledge com	nensurate with w	hat is recognized amon	g the different u	niversitie	es of				
the world, especi	ally the sober or	les.	0						
Method of	Way of	Name of unit or	Required	Hour	The				
assessment	learning	subject	learning	S	week				
Daily and monthly		Biochemistry and its	outcomes						
exam, attendance and		fielde							
reports		lielus							
	Lecture	The components of	Knowledge	5	1				
		the living cell and its							
		functions							
Daily and monthly		Carbohydrates –							
exam, attendance and reports		their importance is							
roporto	Lecture	defined by their	Knowledge	5	2				
		defined by their	ege		_				
		sections							
Daily and monthly		Single sugars - similar							
exam, attendance and		In monosaccharides -							
reports	Lecture	the derivatives of monosaccharides - the	Knowledge	5	3				
		ring structure of							
		sugars			<u> </u>				
		1							

Daily and monthly exam, attendance and reports	Student groups	Low-lying polysaccharides – their reduced and	Knowledge and skill	5	4
Daily and monthly		unreduced types			
exam, attendance and	Scientific trips to some	Many homogeneous		_	_
reports	departments in	and heterogeneous	Knowledge	5	5
Daily and monthly	the province	sugars			
exam, attendance and	Lecture	The first month	Knowledge	5	6
reports		exam			
exam, attendance and		Fat – define its			I
reports		importance – fatty		5	
		acids its sections -			I
	Lecture	their composition -	Knowledge		7
		their interactions –		5	ſ
		geometric			I
		similarities to fatty			I
		acids			I
Daily and monthly		Fat sections -			
reports		simple fats - types			8
		(oils, fats and		_	
	Lecture	candles) – their	Knowledge	5	
		composition – fat			1
		constants			I
Daily and monthly		And the shape and			
exam, attendance and reports	Lecture	shape of the boat -	Knowledge	5	9
		the shape of it	and sum		I
Daily and monthly		Amino acids – their			
exam, attendance and reports	Lecture	sections - their	Knowledge and skill	5	10
		structures – amino			I
	<u> </u>	I I		<u> </u>	
		2			

		acid properties -					
		their interactions					
Daily and monthly		Peptides – proteins					
reports		- defined by their					
	Student	sections – protein	Knowledge	5	11		
	groups	synthesis levels –					
		denera					
Daily and monthly		Second month	Knowledge				
reports	Lecture	exam	and skill	5	12		
Daily and monthly		Nucleic acids – their					
reports		importance as					
	_	nucleotides – their	Knowledge	5			
	Lecture	functions – their	and skill		13		
		composition – types					
		of nucleic acids					
Daily and monthly		Enzymes – defined	Knowledge				
reports	Lecture	- the mechanism of					
		action of the					
		enzyme – classified					
		 inert and active 		5	14		
		enzymes – factors					
		affecting the speed					
		of the enzymatic					
		reaction					
Daily and monthly	Lecture	Explain the lock and	Knowledge	-	4 5		
reports	Lecture	key theory	and skill	5	15		
10. Evaluation of t	the decision						
Quarterly pursuit so	core of (40%)	distributed (10) s	cores for dai	ly prepa	aration,		
exam (15) score, and the final exam score of (60%)							
11. Sources of learning and teaching							
		3					
		J					

Lectures prepared by the teacher based on the relevant	Required books				
books and references.	(methodology, if any)				
Chemical by the Dalai Lama	Principal references (sources				
Iraqi academic scientific journals, including the Journal	Recommended books and				
of the University of Kirkuk for Chemical Sciences	supporting references				
Biochemistry and its fields	(scientific journals, reports)				
- International magazines and Scones absorption	Electropic references Interne				
International magazines and Scopas absorption					
magazines	sites				
Model description of the decision					

Course Description Form							
1. Course Name:							
		Ι	Principle of microbiology				
2. C	ourse Co	ode:					
			MIBI213				
3. Se	emester /	/ Year:					
		f	ïrst semester/second year				
4. D	escriptio	on Preparation Date:					
			03/04/2024				
5. A	vailable	Attendance Forms:					
			Mandatory				
6. N	umber o	f Credit Hours (Total)	/ Number of Units (Tot	al)			
		(5)	Hours, Number of units (3)			
7. C	ourse ad	ministrator's name (n	nention all, if more than	one name)			
N	ame: Dr.	. kawther hkeem ibrahei	im Email: microbiology_	1975@uokirkuk	.edu.iq		
8. C	ourse O	bjectives					
The c	ourse air	ns to raise the level of	students' knowledge abo	out the microbiol	logy projects		
and h	ow to d	listinguish between the	m practically and culturi	ng with acknow	ledging how		
charac	cterizatio	n laboratory.					
9. T	eaching	and Learning Strategi	es				
Verba	l commu	inication with students,	urging them to work tog	ether in the learn	ning process,		
using	written c	communication skills to	increase comprehension,	as well as the b	rainstorming		
metho	od to attra	act students' attention, a	ctivate the thinking strate	gy according to	the student's		
ability	v, and con	nduct scientific visits to	agricultural projects.				
10. C	Course St	ructure					
Week	Hours	Required Learning	Unit or subject name	Learning	Evaluation		
··· ceix	Hours	Outcomes	enne or subject nume	method	method		
		- Introduction to			Daily and		
		- Know general			monthly		
		aspect of	Introduction and the		exam,		
1	5	microbiology	historical development of	lecture	and reports-		
		Know the important	microbiology		Making		
		development of			quizzes		
		microbiology			- Discussion		
		 How to classifying 	The classification of				
		bacteria	microorganisms Nutritional requirements of		Daily and		
2	5	 Know the general 	bacteria	looturo	monthly		
2	5	structure of		lecture	exaili,		
		Dacteria Know the physiology of			and reports		
		bacteria			una reporto		
		Microbial control	- Know the different		Daily and		
3	5	Sterilization and	types of microbial	lecture	monthly		
		Disinfection	control		exam,		

			How to use the sterilization techniques for medical equipments		attendance and reports
4	5	Structure of bacteria components	knowledge	Lecture.working in lab as group	Daily and monthly exam, attendance and reports
5	5	Classification of bacteria	Classification of bacteria depending on family,class,order,genus	Lecture working in lab as group	Daily and monthly exam, attendance and reports
6	5	History,Classification of fung	Intensive study fungi.structure,nutartion ,physiology	Lecture working in lab as group	Daily and monthly exam, attendance and reports
7	5	History ,Classification of yeast	Intensive study fungi.structure,nutrition ,physiology	Lecture working in lab as group	Daily and monthly exam, attendance and reports
8	5	History ,Classification of algae	Intensive study fungi.structure,nutrition ,physiology	Lecture working in lab as group	Daily and monthly exam, attendance and reports
9	5	History ,Classification of protozoa	Intensive study fungi.structure,nutrition ,physiology classification,Knowledge, skill	Lecture working in lab as group	Daily and monthly exam, attendance and reports
10	5	History ,Classification of virus	Intensive study fungi.structure,nutrition ,physiology,classification Knowledge, skill	Lecture working in lab as group	Daily and monthly exam, attendance and reports
11	5	Control of microorganism	Factores on microorganism growth,control,prevention	Lecture working in lab as group	Daily and monthly exam, attendance and reports
12	5	antibiotic	Study types of antibiotics ,classification act work with site effects on it	Lecture working in lab as group	Daily and monthly exam, attendance and reports
13	5	pathogensis	Doses of effect and type of toxins for each bacteria and workss	Lecture working in lab as group	Daily and monthly exam,

						attendance
ļ						and reports
			. Stı	udy types of	Lecture	Daily and monthly
14	5	Microorganism in	microog	gransim with acts	working in lab	exam,
		1000	dis	advantages	as group	attendance
						and reports
			Types a	nd classification	Lecture	monthly
15	5	Micro in	for each	h one and works	working in lab	exam,
		water,air,industraiai	enviror	ments and works	as group	attendance
11.0		1 4	•			and reports
	<u>ourse E</u>	valuation	• •	(400()) 1: : 1	(10) 1	C 1 1
The g	grade for	r the semester examin	ation is	(40%), divided	1 into (10) grad	es for daily
prepar	ration, pa	articipation, and submit	ing repo	orts, (30) grades	for monthly examine (6	(100) ms, with two
12 T		s for each exam (15) gra	ides, and	the grade for the	e final exam is (o	0%).
14.1	12.Learning and Teacning Resources			Lectures prepa	red by the teacher	· based on
Required textbooks (curricular books, if any)			relevant books	and references.	based on	
			Whitman, William B	; Rainey, Fred; Kämpfer	, Peter;	
				Trujillo, Martha; Chun, Jonsik; Devos, Paul; Hedlund,		
				Brian; Dedysh, Svetlana (eds.) (2015). Bergey's Manual		
				of Systematics of Archaea and Bacteria. John Wiley and		
				Sons.		
Main	f	()		4- Richard A. Harvey, Cynthia Nau Cornelissen and Bruce		
Main	reference	es (sources)		D. Fisher. Microbiology. (Lippincott's Illustrated		
				Reviews) 3 rd edition. 2014		
				5- Bailey and Scott's.(2014). Diagnostic		
			microbiology.Els	eiver,2014.		
		6 Brock TD.Madigan M. Martinko J. et al.editors: Biology				
			of microbiology. Upper Saddle River, NJ.2009. Prentice Hall			
Recor	nmended	books and references		Web sites of Mic	robiology	
(scien	tific jour	nals, reports)				

Course Description Form

Course Description Form						
1. Course I	1. Course Name:					
Forest machin	Forest machinery					
2. Course (2. Course Code:					
FOMA214						
3. Semeste	er / Year:					
First semester	/second year					
4. Descript	tion Preparation Date:					
31/3/2024						
5. Availabl	e Attendance Forms:					
Is mand	atory					
6. Number	of Credit Hours (Total) / Num	ber of Units (Total)				
(5) hours, (2)	hours for the theoretical pa	art and (3) hours for the practical pa				
number of uni	its (۲)					
7. Course	administrator's name (men	tion all, if more than one name)				
Name: M	AA-NIHAYAT HUSSEIN AME	EN				
Email: n	nnas_int@uokirkuk.edu.iq					
8. Course (Objectives					
Course Objectives	S	definition, qualifying and training				
		Introducing a student to general concepts and				
		definitions in forest machinery, motivating him				
		with deductive skills and introducing the student arithmetic problems				
9. Teaching	and Learning Strategies	F				
<i>y</i> . roadini						
Strategy						
	1-Identifying the componen	ts and parts of forest machines and machines,				
	identifying the engine parts,	devices and systems associated with them, an				
	now to create productivity and energy and shift towards more mechanical harvesting technology for these machines					
	2- Presenting questions about the topic to demonstrate students'					
	understanding through their answers					
	3- Conduct daily and month	ly examinations and prepare practical reports				
	ruoturo					
10. Course St	TUCIUIE					

Week	Hours	Required Learning	Unit or subject	Learning	Evaluation									
		Outcomes	name	method	method									
١	۲+۲	Lectures + exercises	introduction and	Lectures +	Daily questions									
		and practical	definition of forest	teaching-	+ tests									
		observations	machinery sciences +	learning aids										
			identifying the types of											
			pullers and their general											
			specifications											
۲	1+1	Lectures + exercises	Basics of forestry	Lectures +	Daily questions + tests									
		and practical	tractor classification +	teaching-	1 10515									
		observations	learning about the main	learning aids										
			parts of forestry											
	w . v		machinery		Daily quastions									
٣	1+1		Types of compustion	Lectures +	+ tests									
			engines (examples of	teaching-										
		observations	lograning about ongine	learning alus										
			narts operation and											
			maintenance											
	۳+۲	Lectures + evercises		Lectures +	Daily questions									
٤		and practical	mathematical	teaching-	+ tests									
		observations	applications	learning aids										
•	۳+۲	Lectures + exercises	The methods used when	Lectures +	Daily questions									
0		and practical	transferring and	teaching-	+ tests									
		observations	converting movement in	learning aids										
			agricultural machinery	, J										
			and equipment +											
			identifying the parts of											
			the devices and systems											
			and maintaining them											
٦	Examination	Examination	Examination	Examination	Examination									
٧	۳+۲	Lectures + exercises	identify engine parts	Lectures +	Daily questions									
		and practical	(types)	teaching-	+ tests									
		observations	Lubrication systems in	learning aids										
			engines + mathematical											
			applications											
٨	۲+۳	Lectures + exercises	Identify engine parts	Lectures +	Daily questions									
		and practical	(types)	teaching-	+ tests									
		observations	Cooling systems in	learning aids										
			engines + training on											
			driving the tug and											
			connecting machines to											
			the tug											
٩	۲+۳	Lectures + exercises	Forest land evacuation	Lectures +	Daily questions									
		and practical	equipment +	teaching-	+ tests									
		observations	identification of	learning aids										
			1											
---	---	---	--------------------------------------	---	--	--	--	--	--	--	--	--	--	--
			equipm	ent (calibration										
	~ · · ~		and ma	Intenance)		Daily questions								
۱.	1 + 1	Lectures + exercises	Forest	and plowing	Lectures +	+ tests								
			equipm	ent + training on	teaching-									
		observations	equipm		learning alus									
	۳+۲	Lectures + evercises	Eorest	cutting equipment	Lectures +	Daily questions								
11		and practical	and dro	onning technology	teaching-	+ tests								
		observations	+ th	e use of forest	learning aids									
			machi	nerv in plantation										
				forests										
	۳+۲	Lectures + exercises	Forest	try tree transport	Lectures +	Daily questions								
, ,		and practical	equipm	nent + conducting	teaching-	+ tests								
		observations	a stu	idy on safety in	learning aids									
			с	utting wood	-									
17	Semester	Lectures + exercises	For	est tree protection	Examination	Daily questions								
	exam	and practical	equip	oment + economic		+ tests								
		observations	fe	easibility study for										
			ag	ricultural projects										
١٤	۲+۲	A field visit to the fields	Firefigh	ting equipment +	Lectures +	Daily questions								
			familiar	ization with the	teaching-	+ tests								
			land ma	anagement	learning aids									
			program	n										
10	۳+۲	Examination		Examination	Examination	Examination								
11 C	ouroo Evoluo	tion				The second secon								
11.00	Juise Evalua	uon												
Da	aily and mon	thly tests												
Da	aily and mon	thly tests	are mor	tolo of opiontific	disquesions rol	ated to the								
Da Da	aily and mon	thly tests asking questions that a	are mod	lels of scientific	discussions rela	ated to the								
Da Pa ac	aily and mon articipate by a cademic subje	thly tests asking questions that a ect	are moo	tels of scientific	discussions rela	ated to the								
Da Pa ac	aily and mon articipate by a cademic subju	thly tests asking questions that a ect ctivities through new w	are moo vork and	dels of scientific d scientific repor	discussions rela	ated to the								
Da Da Pa ac Su 12.	aily and mon articipate by a ademic subjution a ubmissions a	thly tests asking questions that a ect ctivities through new w nd Teaching Resou	are moo	dels of scientific d scientific repo	discussions rela	ated to the								
Da Da Pa ac Su 12.	aily and mon articipate by a cademic subju ubmissions a Learning a	thly tests asking questions that a ect ctivities through new w nd Teaching Resou	are moo vork and irces	dels of scientific	discussions rela ts	ated to the								
Da Da Pa ac Su 12. Require	aily and mon articipate by a cademic subju ubmissions a Learning a ed textbooks	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an	are moo vork and irces	dels of scientific d scientific repor . Agricultural e - Dr. Abdul Mu	discussions rela ts equipment - Mir uti Al-Khafaf	ated to the nistry of Agricult 1981/General								
Da Da Pa ac Su 12. Require	aily and mon articipate by a cademic subju ubmissions a Learning a ed textbooks	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an	are moo vork and irces iy)	dels of scientific d scientific repor . Agricultural e - Dr. Abdul Ma Authority for A	discussions rela ts equipment - Mir uti Al-Khafaf Agricultural Edu	ated to the histry of Agricul 1981/General location and								
Da Da Pa ac Su 12. Require	aily and mon articipate by a cademic subju ubmissions a Learning a ed textbooks	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an	are moo vork and irces	dels of scientific d scientific repor . Agricultural e - Dr. Abdul Mu Authority for A Extension - Ba	discussions rela ts equipment - Mir uti Al-Khafaf Agricultural Edu ghdad - Iraq	ated to the histry of Agricul 1981/General lication and								
Da Da Pa ac Su 12. Require	aily and mon articipate by a cademic subju ubmissions a Learning a ed textbooks	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an	are moo vork and irces	dels of scientific d scientific report . Agricultural e - Dr. Abdul Ma Authority for A Extension - Ba 3- Principles o	discussions rela ts equipment - Mir uti Al-Khafaf Agricultural Edu ghdad - Iraq f Soil Physics. I	nistry of Agricult 1981/General cation and Lal ana Shukla.								
11.00 Da Pa ac Su 12. Require	aily and mon articipate by a cademic subju ubmissions a Learning a ed textbooks	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an	are moo vork and irces iy)	dels of scientific d scientific report . Agricultural e - Dr. Abdul Mu Authority for A Extension - Ba 3- Principles o 2004. USA.	discussions rela ts equipment - Mir uti Al-Khafaf Agricultural Edu ghdad - Iraq f Soil Physics. I	ated to the histry of Agricult 1981/General location and Lal ana Shukla.								
Da Da Pa ac Su 12. Require	aily and mon articipate by a ademic subju ubmissions a Learning a ed textbooks	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an	vork and Irces	dels of scientific d scientific report - Dr. Abdul Mi Authority for A Extension - Ba 3- Principles o 2004. USA. 4- Environment	discussions rela ts equipment - Mir uti Al-Khafaf Agricultural Edu ghdad - Iraq f Soil Physics. I at of Soil Physic	ated to the histry of Agricult 1981/General location and Lal ana Shukla. s. D. Hillel. 2004								
Da Da Pa ac Su 12. Require	aily and mon articipate by a cademic subju ubmissions a Learning a ed textbooks	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an	vork and vork and irces	dels of scientific d scientific report . Agricultural e - Dr. Abdul Mu Authority for A Extension - Ba 3- Principles o 2004. USA. 4- Environment USA.	discussions related ts equipment - Miruti Al-Khafaf Agricultural Edu ghdad - Iraq f Soil Physics. I at of Soil Physic	ated to the histry of Agricult 1981/General location and Lal ana Shukla. s. D. Hillel. 2004								
11. or Da Pa ac Su 12. Require Main re	aily and mon articipate by a cademic subju ubmissions a Learning a ed textbooks	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an urces)	vork and vork and irces vy)	dels of scientific d scientific report . Agricultural e - Dr. Abdul Mu Authority for A Extension - Ba 3- Principles o 2004. USA. 4- Environmen USA. The Int	discussions related ts equipment - Mir uti Al-Khafaf Agricultural Edu ghdad - Iraq f Soil Physics. I at of Soil Physic ernet in general	nistry of Agricult 1981/General Ication and Lal ana Shukla. s. D. Hillel. 200								
11. or Da Pa ac Su 12. Require Main re Recomu	aily and mon articipate by a cademic subju ubmissions a Learning a ed textbooks eferences (so mended boo	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an urces) ks and references (sc	are mod vork and irces iy)	dels of scientific d scientific report . Agricultural e - Dr. Abdul Mu Authority for A Extension - Ba 3- Principles o 2004. USA. 4- Environmen USA. The Int Messag	discussions related ts equipment - Mir uti Al-Khafaf Agricultural Edu ghdad - Iraq f Soil Physics. I at of Soil Physic ernet in general ges and theses, a	ated to the histry of Agricult 1981/General location and Lal ana Shukla. s. D. Hillel. 2004 ncient and mode								
II. de Da Pa ac Su 12. Require Main re Recomi journals	aily and mon articipate by ademic subju ubmissions a Learning a ed textbooks eferences (so mended boo s, reports)	thly tests asking questions that a ect ctivities through new w nd Teaching Resou (curricular books, if an urces) ks and references (sc	vork and Irces IV)	dels of scientific d scientific report . Agricultural e - Dr. Abdul Mu Authority for A Extension - Ba 3- Principles o 2004. USA. 4- Environmen USA. The Int Messag	discussions related ts equipment - Mir uti Al-Khafaf Agricultural Edu ghdad - Iraq f Soil Physics. I at of Soil Physic ernet in general ges and theses, a	ated to the histry of Agricult 1981/General location and Lal ana Shukla. s. D. Hillel. 2004 ncient and mode								



Course Description Form 1. Course Name: Genetics 2. Course Code: GENE215 3. Semester / Year: First Semester/second year 4. Description Preparation Date: 28/03/2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) (5) Hours, Number of units (3) 7. Course administrator's name (mention all, if more than one name) Name: Asst. Prof. Dr. Hussein Abdullah Ahmed Email: husseinabdullah@uokirkuk.edu.iq 8. Course Objectives The aim of the article is to acquaint the student with the principles of genetics and the laws that regulate this science, introduce the student to the basic principles and ways of applying Mendelian laws of heredity in life, elevate the student's understanding of ways to improve breeding in plants, mechanisms of genetic information transfer among microorganisms, familiarize the student with the extent of inheritance and transmission of traits from one generation to another, and ways to improve generations. 9. Teaching and Learning Strategies The student or learner should be able to improve cognitive objectives by introducing them to the types of genetic material at the beginning and the nucleus's reality, the mechanism of genetic material transmission from one generation to another, examining cells under the microscope, the skills objectives specific to the program, introducing the student to how traits are passed from one generation to another, the student's ability to interpret genetic outcomes, as well as applications of genetics. **10.** Course Structure Required Unit or subject Week Hours Learning Learning method **Evaluation method** name Outcomes Introduction to Genetics Dominant and **Recessive Alleles** Explanation, Monohybrid Daily and monthly Knowledge and presentation of the 1 5 Cross and exam. attendance skills model. and the Mendel's First and reports lecture. Law Dihybrid Cross and Mendel's Second Law Explanation, Daily and monthly Knowledge and Genetics presentation of the 2 5 exam, attendance skills **Fundamentals** model, and the and reports lecture. Explanation, Daily and monthly Knowledge and The chemical 3 5 presentation of the exam, attendance skills basis of heredity model, and the and reports

		-		1	1
				lecture.	
4	5	Knowledge and skills	Levels of DNA organization in chromosomes	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
5	5	Knowledge and skills	Genes	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
6	5	Knowledge and skills	Genetic mutations	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
7	5	Knowledge and skills	Deoxyribonucleic acid replication	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
8	5	Knowledge and skills	RNA cloning	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
9	5	Knowledge and skills	Protein biosynthesis	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
10	5	Knowledge and skills	Polymerase chain reaction techniques	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
11	5	Knowledg e and skills	Cellular division	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
12	5	Knowledge and skills	Linkage, crossing over, and chromosomal mapping	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
13	5	Knowledge and skills	Cytoplasmic genetics	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
14	5	Knowledge and skills	Quantitative genetics and heritability coefficient, population genetics	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
15	5	Knowledge and skills	Genetic Engineering	Explanation, presentation of the model, and the lecture.	Daily and monthly exam, attendance and reports
11.Co	ourse E	valuation			

The grade for the semester endeavor is (40%), divided into (10) grades for daily preparation, participation, and submitting reports, (10) grade for the practical semester exams, and (20) for the theoretical semester exams, and the final exam grade is from (60%), and the final practical exam is (20) The final theoretical exam is (40) marks

12.Learning and Teaching Resources		
B aguired textbooks (aurrigular books, if any)	The lecturer prepares lectures based on releva	
Required textbooks (curricular books, if ally)	books and references.	
	Introduction to Genetics / Assistant	
	Professor Dr. Abbas Hussein Maghir Al-	
Main references (sources)	Rubaie / 2016 Theoretical Part	
Main references (sources)	Plant Genetics / Dr. Ghassan Ayyash, Dr.	
	Mohammed Sleiman, and Mrs. Farah Aloush	
	/ 2016 Practical Part	
Pasammandad books and references	Iraqi academic scientific journals, including	
(acientific journals, reports,)	Kirkuk University Journal of Agricultural	
(scientific journais, reports)	Sciences	
Electronic References, Websites	International journals included in Scopus	

1. Course Name:

Transfer of agricultural techniques

2. Course Code:

TRAG216

3. Semester / Year:

First semester/ Second year

4. Description Preparation Date:

28/03/2024

5. Available Attendance Forms:

Mandatory

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

(2) Hours, Number of units (2)

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

Name: Prof. Dr. khattab Abdullah Mohammed Email: khattab1981@uokirkuk.edu.ig

8. Course Objectives

The graduating student will be able to deal with agricultural technology, determine which one is appropriate for local conditions, or adapt it for imported ones, and possess the skills that will help him transfer it to farmers' fields, apply it to them, and address the problems that hinder its application.

9. Teaching and Learning Strategies

Verbal communication with students, urging them to work together in the learning process, using written communication skills to increase comprehension, as well as the brainstorming method to attract students' attention, activate the thinking strategy according to the student's ability, and conduct scientific visits to agricultural projects.

10. Co	10. Course Structure									
Week	Hours	Required LearningUnit orLearninOutcomessubject namemethod		Learning method	Evaluation method					
1	2	Definition of agricultural techniques	knowledge	lecture	Daily and monthly exam, attendance and reports					
2	2	Classification of agricultural techniques	knowledge	lecture	Daily and monthly exam, attendance and reports					
3	2	The importance of agricultural techniques	knowledge	lecture	Daily and monthly exam, attendance and reports					
4	2	Methods of transferring agricultural technologies	Knowledge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports					
5	2	Classification of methods of transferring agricultural technologies	knowledge	lecture	Daily and monthly exam, attendance and reports					

6	2	Characteristics of workers in transferring agricultural technologies	Kn sl	owledge, kill and attitude	lecture	Daily and monthly exam, attendance and reports	
7	2	The role of modern technologies in agricultural development	kn	owledge	lecture	Daily and monthly exam, attendance and reports	
8	2	Adopting agricultural technologies	kn	owledge	lecture	Daily and monthly exam, attendance and reports	
9	2	Categories of adoptees	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
10	2	Factors affecting the adoption of agricultural technologies	Knowledge, skill		lecture	Daily and monthly exam, attendance and reports	
11	2	Advantages of technology and speed of adoption	Knowledge, skill		lecture	Daily and monthly exam, attendance and reports	
12	2	Agricultural cognitive systems	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
13	2	Characteristics of the agricultural sector	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
14	2	Change agent	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
15	2	Electronic agricultural extension	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
11.Co	ourse Ev	aluation					
The graph of the g	ade for ation, par y exams	the semester examination ticipation, and submitting for each exam (15) grade	on is g repo es, and	(40%), d orts, (30) g d the grade	ivided into rades for me for the fina	(10) grades for daily onthly exams, with two l exam is (60%).	
12.1.0	aimig	and Teaching Resources		Lectures	nrenared by	the teacher based on	
Requir	ed textbo	ooks (curricular books, if	relevant books and references.				
Main r	eferences	s (sources)		principles Abdullah	of Agricult Al-Samarra	tural extension, written b ui	
Recom (scient	mended	books and references als, reports)		Iraqi academic scientific journals, including Kirkuk University Journal of Agricultural Sciences			
Electronic References, Websites				International journals included in Scopus			

Course Description Form								
1. Course Name:								
Compu	iter/3							
2. Co	ourse Co	de:						
Со	mp217							
3. Ser	mester /	Year:		-				
4 D	•	first seme	ster/ secon	d year				
4. De	scription	n Preparation Date:	2/02/2024					
5 4 1	oilobla /	Attendance Forms:	5/05/2024					
J. AV		Attendance Forms.	Iandatory					
6. Nu	mber of	Credit Hours (Total) / Num	ber of Uni	ts (Total)				
		(3) Hours, N	Number of	units (1)				
7. Co	urse adı	ministrator's name (mention	all, if mor	e than one	name)			
Na	me:Assi	st Prof. Basira Abdullah Ahme	ed Email:	baseraabdul	lah@uokirkuk.edu.iq			
8. Co	urse Ob	jectives						
	Deve	loping the student's abiliti	es to mas	ster making	g tables and writing			
	math	ematical equations via the co	omputer					
0 Та	achina a	nd Laarning Stratagies						
Verbal	commu	nication with students urging t	hem to wo	rk together	in the learning process			
	written	communication skills to	increase o	comprehensi	on, as well as the			
brainst	orming r	nethod to attract students' atter	ntion, activ	ate the thin	king strategy according			
to the s	student's	ability.	,		8 8, 8			
10. Co	ourse Sti	ructure		-				
Week	Hours	Required Learning Outcomes	Unit or subject	Learning method	Evaluation method			
			name					
		Run Microsoft Word -						
		open a new document -						
1	3	save the working page -	Knowled	lecture	Daily and monthly exam,			
		make a backup copy -	ge		attenuance and reports			
		close a file - open a stored						
		file						
	3	Inverting the language						
		between Latin and Arabic						
		- preparing an Arabic and	Knowled		Daily and monthly exam.			
2		Latin paragraph - preview	ge	lecture	attendance and reports			
		before printing - printing	-		-			
		the worksheet - specifying						
		the text - font and size -						

		underlining - changing letter case			
3	3	Moving and copying information - Word clipboard - Search and replace - Numbers and bullets - Spell checker - Undo - Reverse undo - Page setup - Page margins - Text alignment - Line spacing	Knowled ge	lecture	Daily and monthly exam, attendance and reports
4	3	Inserting a table - Inserting rows and columns - Selecting the row/column - Selecting the table - Adding borders and deleting cells - Shading the frame	Knowled ge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports
5	3	Merge and split cells - Split the table - Change the height and width of cells - Auto fit - Repeat the table title - Header and footer - Sorting text	knowled ge	lecture	Daily and monthly exam, attendance and reports
6	3	Page numbering - writing code - toolbar - drawing - deleting drawing shapes - filling - drawing line color - inserting, editing, deleting and moving the image	Knowled ge, skill and attitude	lecture	Daily and monthly exam, attendance and reports
7	3	Microsoft Excel: Run it - Excel worksheet - Enter data - Save the file - Print the worksheet - Exit the program	knowled ge	lecture	Daily and monthly exam, attendance and reports
8	3	Practical exam	knowled ge	lecture	Daily and monthly exam, attendance and reports
9	3	Selecting cells - types of data - using mathematical formulas to select data - relative and	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports

		absolute addresses			
		- formulas that			
		produce error			
		values - moving			
		cells - copying data			
		Move or copy a worksheet			
		and replace - move to a			
		cell - delete cells -			
		erase/insert a row or			
		column			
	3	Organizing the address list			
		- Copying images and texts			
		- Splitting web pages -			
		Printing web pages -			
10		Search engines - How to	Knowled	lecture	Daily and monthly exam,
		search for information on	ge, skin		attendance and reports
		the network - Using the			
		search button in the			
		toolbar -			
	3	Modify the height of			
		a row or column -	T 7 1 1		
11		show and hide the	Knowled	lecture	Daily and monthly exam,
		row or column	ge, skill		attendance and reports
12	3	Rename the worksheet -	Knowled	lecture	Daily and monthly exam,
12		font type, size and style	ge, skill	lecture	attendance and reports
13	3	Shape numbers - align	Knowled	lecture	Daily and monthly exam,
15		data - add borders	ge, skill	lecture	attendance and reports
	3	Fill cells - sort data -	Knowlad		Daily and monthly ayam
14		create a chart	ge skill	lecture	attendance and reports
			50 , 51111		autoriaurice una reports
	3	Edit Created			
		Layout -			
		Header/Footer			
15		Insert and	Knowled	lecture	Daily and monthly exam,
10		remove a page	ge, skill	locture	attendance and reports
		break			
11.Co	ourse Ev	aluation	(1001) 1	• • • • •	
The gr	ade for	the semester examination is	(40%), d	ivided into	(10) grades for daily
prepara	ation, pai	ticipation, and submitting repo	orts, (30) g	for the firm	onthis exams, with two 1 even is $\langle (00) \rangle$
monthl	y exams	for each exam (15) grades, and	u the grade	for the fina	1 exam 1s (60%).

12.Learning and Teaching Resources	
Paguired textbooks (curricular books, if any)	Lectures prepared by the teacher based on
Required textbooks (curricular books, if any)	relevant books and references.
	Computer basics and office applications (Part
Main references (sources)	second) / Ziad Muhammad Aboudi, Ghassan
	Hamid Abdel Majeed, Mustafa Diaa Al-Hass
Recommended books and references	Iragi agadamia agiantifia journala including
(scientific journals, reports)	fraqi acadefilic scientific journais, fiicidding
Electronic References, Websites	International journals.

		Outc	omes					
		Lear	ning			method	method	
Week	Hours	Requ	ired		Unit or subject name	Learning	Evaluation	
10. Cours	se Structu	re						
The decisions issued against the perpetrators of crimes, the types of international crimes and their impact on the citizer . And mass graves.9. Teaching and Learning StrategiesStrategyTo make the learner able to know the types of international crimes and their impact on the people from a psychological, social and religious perspective and the punishments issued against the perpetrators of such crimes, as well as to know the oppression, abu murder and intimidation committed by the previous regime against Iraqi society.								
				com The c	mitted by the Baath regin decisions issued against f	the perpetrato	nisnments. ors of crimes, th	
Course Obje	ectives			The o	course aims to introduce	the student to	o the crimes	
8. Cou	irse Objec	ctives						
Nar Ema	ne: m. sha ail: shahadji	ahad _{umaa@}	jumaa n uokirkuk.e	noha du.iq	ummad			
7. Cou	urse adm	inistr	ator's n	ame	e (mention all, if mor	e than one	e name)	
6. Nur	$\frac{1}{2} \frac{1}{2} \frac{1}$	redit	Hours (7	[otal]) / Number of Units (7	Fotal)		
Ма	ndatory							
5. Ava	ailable Att	tendar	nce Forn	ns:				
4. Des	3 2024	Prepa	Iration	Dates				
Filst Sell			year					
3. Sen	<u>nester / Y</u>	ear:	woor					
CRBA218								
2. Cou	irse Code	:						
The crime	The crimes of the Baath regime in Iraq							
1. Cou	irse Nam	e:						

	r	1			
1	2	Learn about the concept of crimes and	Crimes of the Baath regime according to the Iraqi	Lecture and discussion	Oral examinatio and
		their categories	Supreme Criminal Court Law in 2005		essay
2	2	Identify the types of international crimes	Crimes of the Baath regime according to the Iraqi Supreme Criminal Court Law in 2005	Ш	Ш
3	2	Learn about the decisions issued by Supreme Criminal Court	Crimes of the Baath regime according to the Iraqi Supreme Criminal Court Law in 2005	=	=
4	2	Identify the mechanisms of psychological crimes.	Psychological and social crimes and their effects	=	=
5	2	Identify the effects of psychological crimes	Psychological and social crimes and their effects	=	=
6	2	Identify social crimes	Psychological and social crimes and their effects	=	=
7	2	Identify violations of Iraqi laws. And learning about places of prisons detention of the Baath regime.	Psychological and social crimes and their effects		
8	2	exam			
9	2	Identifying military and radioactive contamination and mine explosions	Environmental crimes of Baath regime in Iraq	=	=
10	2	Recognizing the destruction of cities and villages (scorched earth policy)	Environmental crimes of Baath regime in Iraq	=	=
11	2	Learn about draining marshes razing palm groves, trees and crops	Environmental crimes of Baath regime in Iraq	=	=
12	2	exam			
13	2	Identifying mass Graves	Mass grave crimes	=	=
14	2	Identification of genocide graves related to the Iran-Iraq War of 1980- 1988 AD	Mass grave crimes	=	=

15	2	Identifying t genocidal g victims of the 1991 Shaabaniya	he raves of uprising	Mass grave crimes	=	=		
11. Cou	ırse Evalu	ation						
The semes participatic and the fina	ster endea on, (30) m al exam gra	vor is (40 onthly exar ide is (60%	%) distr ns, with).	ibuted (10) grades fo two monthly exams fo	or daily pre r each exam	paration and (15) grades,		
12. Lea	rning and	Teaching	Resourc	ces				
Required te	xtbooks (cu	irricular boo	ks, if any)	The crimes of the Baa	The crimes of the Baath regime in Iraq			
Main references (sources)				International respons crime of genocide - Th swamps in southern crimes of the Baath ro , a people under the so	International responsibility for committing the crime of genocide - The geography of the marshes and swamps in southern Iraq – Environmental crimes of the Baath regime in Iraq - Mass graves , a people under the soil			
Recommend	ded boo	ks and	referenc	ces				
(scientific jo	urnals, repo	orts)						
Electronic R	References,	Websites						

Course Description Forest soil						
1. Course Name:						
		Pr	inciple of Forest	t soil		
2. Co	ourse Co	de:				
FC	SO221					
3. Se	mester /	Year:				
		Secon	d semester/ Seco	ond year		
4. De	scription	n Preparation Date:				
			۲/0٤/2024			
5. Av	ailable A	Attendance Forms:				
			Mandatory			
6. Nu	mber of	Credit Hours (Total) /]	Number of Uni	ts (Total)		
		(5) Ho	ours, Number of	units (3)		
7. Co	ourse adu	ninistrator's name (mer	ntion all, if mor	e than one i	name)	
Na	me: Dr.	Ali hakeem dohan Emai l	: Alihakeem @	uokirkuk.ed	<u>lu.1q</u>	
8. Co	urse Ob	jectives		<u>C (1) (1</u>	1	
This co	ourse des	cription provides a necess	sary summary of	t the most in	nportant characteristics	
of the	course at	nd the learning outcomes	s expected of the	e student to	achieve, as soil forms	
	importor	t component of forest	and woodland	en dunt for	minions of years. Soli	
import	iniportan	vetem processes such	and woodiand	take deco	mosition and water	
availab	ality The	soil helps stabilize trees	and provides th	em with wa	ter and nutrients Trees	
and oth	ner nlante	s in turn play an import	and provides in the fo	ormation of	new soil as leaves and	
other p	lants rot	and decompose.			new son, as reaves and	
Howey	er. the re	elationship between soil	and forests is m	uch more co	omplex and broad than	
that. So	oil and fo	brest are intrinsically inter	rconnected, and	each has en	ormous impacts on the	
other a	and on th	he wider environment. I	nteractions betw	veen forests	and forest soils help	
mainta	in the en	vironmental conditions re	equired for agrie	cultural proc	luction. These positive	
impact	s are far	-reaching and ultimately	help ensure a	productive	food system, improve	
rural li	velihood	s, and preserve the integri	ity of the enviro	nment in the	e face of change.	
9. Teaching and Learning Strategies						
Verbal	commur	nication with students, urg	ging them to wo	rk together i	in the learning process,	
using	using written communication skills to increase comprehension, as well as the					
brainstorming method to attract students' attention, activate the thinking strategy according						
to the student's ability, and conduct scientific visits to agricultural projects.						
10. Co	ourse Sti	ructure				
Week	Hours	Required Learning	Unit or	Learning	Evaluation method	
		Outcomes	subject name	method		
1	5	A historical overview	Imourladaa	lacture	Daily and monthly exam,	
	5	of the development of	Knowledge	lecture	attendance and reports	
2	5	Soil_forming_minarals	knowledge	lecture	Daily and monthly ayon	
	5		Kilowicuge	iccluit	Daily and monuny exam,	

					attendance and reports
3	5	Rocks that make up forest soil	knowledge	lecture	Daily and monthly exam, attendance and reports
4	5	Weathering of rocks, minerals and soil formation	Knowledge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports
5	5	Concepts of soil science and forestry	knowledge	lecture	Daily and monthly exam, attendance and reports
6	5	Column of forest soil	Knowledge, skill and attitude	lecture	Daily and monthly exam, attendance and reports
7	5	Minerals that make up forest soil	knowledge	lecture	Daily and monthly exam, attendance and reports
8	5	Formation and development of forest soils	knowledge	lecture	Daily and monthly exam, attendance and reports
9	5	Physical characteristics of forest soil and soil moisture	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
10	5	Chemical characteristics of forest soil	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
11	5	Maintaining forest soil fertility - forest fires	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
12	5	Biochemical characteristics of forest soil	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
13	5	Degradation and maintenance of forest soils	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
14	5	Forest soil classification	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
15	5	Determine the organizational property of forest soil	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports
11.C	ourse Ev	valuation			
The goals can be summarized through the following points: The purpose of teaching the curriculum: 1/ Giving the student an idea about forest soil, the effect of forests on soil formation, and the chemical and biological properties of the soil					

and enclinear and biological properties of the soil
2/ Enabling students to know the types of forest soils
3/ Familiarity with the types of soils and the distinction between forest soils and agricultural soils

12.Learning and Teaching Resources				
Paguired textbooks (curricular books, if any)	Lectures prepared by the teacher based on			
Required textbooks (curricular books, if any)	relevant books and references.			
Main references (sources)	Principle of Forest soil			
Main Terefences (sources)	, written by Dr. Essam Abdel Sattar Siddiq			
Decommonded books and references	Iraqi academic scientific journals, including			
(acientific icournels, reports,)	Kirkuk University Journal of Agricultural			
(scientific journais, reports)	Sciences			
Electronic References, Websites	International journals included in Scopus			

Course Description Form 1. Course Name: Foundations of forest development 2. Course Code: PRSI222 3. Semester / Year: Second semester/second year 4. Description Preparation Date: 28/03/2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) (5) Hours, Number of units (3) 7. Course administrator's name (mention all, if more than one name) Name: AKO GHAZI SATTAR E-mail akoghazi@uokirkuk.edu.iq 8. Course Objectives . Methods of cutting and propagating forests and the operations performed on trees during growth. . Growth in trees, physiology of wood formation. General, physical and physical characteristics of wood. Uses of wood, its products, and methods of preserving them 9. Teaching and Learning Strategies Verbal communication with students, urging them to work together in the learning process, using written communication skills to increase comprehension, as well as the brainstorming method to attract students' attention, activate the thinking strategy according to the student's ability, and conduct scientific visits to agricultural projects. **10.** Course Structure Unit or **Required Learning** Learning Week **Evaluation method** Hours subject name method **Outcomes** General introduction Daily and monthly exam, 1 5 knowledge lecture attendance and reports The benefits are economic Daily and monthly exam, 2 5 knowledge lecture attendance and reports Daily and monthly exam, Pure and mixed forests 3 5 knowledge lecture attendance and reports Selection of species for Knowledge, Daily and monthly exam, afforestation: Selection of local 4 5 skills and lecture attendance and reports and introduced tree species attitudes Types of forests in the Arab Daily and monthly exam, 5 5 knowledge lecture world attendance and reports Stages of tree development Knowledge, Daily and monthly exam, 5 6 skill and lecture attendance and reports attitude Selection of species for Daily and monthly exam, 7 5 afforestation: Selection of local knowledge lecture attendance and reports and introduced tree species

8	5	The impact of environmental	kn	owledge	lecture	Daily and monthly exam,
0	5	factors on forests		owiedge		attendance and reports
9	5	Division of forest types	Kn	owledge,	lecture	Daily and monthly exam,
				skill		attendance and reports
10	5	Botanical characteristics: forests	Kn	owledge,	lecture	Daily and monthly exam,
10	5	succession, types of succession		skill	lecture	attendance and reports
		Biological factors: soil				
11	5	revival, competition, parasitism	Kn	owledge,	lactura	Daily and monthly exam,
11	5	mutual relationships between		skill	lecture	attendance and reports
		animals				
12	5	The most common types of	Kn	owledge,	lecture	Daily and monthly exam,
12		trees in natural forests	skill			attendance and reports
13	5	Local and introduced trees in forests	Knowledge,		lecture	Daily and monthly exam,
		The difference between forests	SK1II			attendance and reports
14	5	in the Arab world and other	Kn	owledge, lecture	Daily and monthly exam,	
	-	countries		sk1ll		attendance and reports
		Practical visits to different	Kn	owledge		Daily and monthly ayam
15	5	of living and non-living	KII	skill	lecture	attendance and reports
		environmental conditions		SKIII		attendance and reports
11.Co	ourse Ev	aluation				
The gr	ade for	the semester examination	on is	(40%), d	ivided into	(10) grades for daily
prepara	ation, pai	ticipation, and submitting	g repo	orts, (30) g	rades for mo	onthly exams, with two
monthl	y exams	for each exam (15) grade	es, and	d the grade	for the fina	l exam is (60%).
12. Learning and Teaching Resources						
				Lectures	prepared by	the teacher based on
Required textbooks (curricular books, if any)			relevant books and references			
Main references (sources)						Terences.
Recommended books and references						
(scientific journals reports)						
Flectro	nic Refe	rences Websites		Internati	onal journal	s included in Scorus
Electronic References, websites				mernau	onai journa	is menuacu în scopus

Course Description Form						
1 Course Nomes						
1. Cu	uist ma	ш с. F	Scology and clim	nate		
2. Co	urse Co	de.	cology and enn	late		
2. 00		uc.	ECOL223			
3. Set	mester /	Year:				
		secon	d semester/ seco	ond vear		
4. De	scription	n Preparation Date:				
	4	•	31/03/2024			
5. Av	ailable A	Attendance Forms:				
			Mandatory			
6. Nu	mber of	Credit Hours (Total) / 2	Number of Uni	ts (Total)		
		(5) Ho	ours, Number of	units (3)		
7. Co	ourse adu	ninistrator's name (mer	ntion all, if mor	e than one	name)	
Name:	Bereva	n Qader Omar Email: t	beree.omer@gma	il.com		
8. Co	urse Ob	jectives				
Teachi	ng this su	bject aims to familiarize	the student with	the surrour	nding environment and	
the mo	st import	ant environmental risks p	present in forests	. It also aim	s to enable the student	
to unde	erstand th	e various elements of cli	mate and to follo	ow modern a	and accurate methods	
in mea	suring th	ese elements because of t	heir importance	and direct in	mnact on agriculture	
III IIIca	suring th	ese clements because of t	men importance		inpact on agriculture.	
9. Te	aching a	nd Learning Strategies				
The str	ateov inc	ludes familiarize the stud	lent with enviro	nmental scie	ence and its parts as	
The su	ategy inc			innentai sere	nee and its parts, as	
well as	the facto	ors surrounding it. It also	includes highlig	hting climat	e and its importance	
for play	nts in ger	neral and forests in partic	ular in addition	to studying	the elements of	
ioi più	into in ger	forur und forests in purite		to studying		
climate	e and lear	ming about the devices us	sed to measure the	hem.		
10 Course Structure						
10. 00		Required Learning	Unit or	Learning		
Week	Hours	Autcomes	subject name	method	Evaluation method	
		Introduction and a	subject hame	memou		
	_	brief explanation of			-	
1	5	the radiation	Knowledge	lecture	Report	
		measuring devices				
2	5	The historical	Knowledge	1	C	
2	5	development of	and skills	lecture	Seminar	

		ecology and measuring the temperature of air and soil			
3	5	Parts of ecology and measuring the humidity	Knowledge	lecture	Seminar
4	5	The factors of environment and measuring the dew	Knowledge and skills	lecture	Quiz
5	5	Radiation and measuring the speed and the direction of wind	Knowledge	lecture	Seminar
6	5	The temperature and recording the rain level devices	Knowledge and skills	lecture	Quiz
7	5	Air pressure and measuring the speed and direction of clouds	Knowledge	lecture	Quiz
8	5	Type of winds and its effect on plants	Knowledge, and skills	lecture	Seminar
9	5	The water and the air pressure and measuring the air pressure	Knowledge	lecture	seminar
10	5	Classifying the plants according to its need to water and the effect of climate on the air contamination	Knowledge	lecture	quiz
11	5	Fire, types of fire and its effect on the agricultural lands	Knowledge and skills	lecture	quiz
12	5	Geological layers	Knowledge	lecture	seminar
13	5	Bio factors and the effect of climate phenomenon on plants	Knowledge	lecture	quiz
14	5	Plant succession and the effect of climate on the agriculture	Knowledge	lecture	report

15	5	Contamination and making a tour to climate center in the university of kirkuk	Knowledge	lecture	Quiz		
11.Co	ourse Ev	aluation					
Semester endeavor (40 marks): 25 marks The theoretical part: 20 marks Two monthly							
			exams, 5 marl	ks Reports			
		15 marks	Practical part:	10 marks me	onthly exams, 5 marks		
			student praction	dent practical activity			
Final q	uest (60	marks): 40 marks theoreti	cal questions, 2	juestions, 20 marks practical questions			
12.Le	earning a	and Teaching Resources					
			Introducti	on to ecolog	ıy / dr. ali salim		
Requir	ed textbo	ooks (curricular books, if a	any) shwawra	shwawra			
			Some ne	Some new researches about climate.			
Main references (sources)			Environn	Environment and climate magazine			
Recom	mended	books and references	Internatio	nal periodic	cals and magazines in		
(scienti	ific journ	als, reports)	Clarvit ar	nd Scopus co	ontainers		
Electro	Electronic References, Websites			International periodicals and magazines Clarvit and Scopus containers			

Course Description Form							
1. Course Name:							
			Forest Entomol	ogy			
2. Co	ourse Co	de:	FOENDAA				
2 5 0		Vaan	FOEN224				
J. Se	emester /	Year:	cond semester/sec	ond year			
4. De	escription	n Preparation Date:	cond semester/see				
			29/03/2024				
5. Av	vailable A	Attendance Forms:					
			Mandatory				
6. Ni	umber of	Credit Hours (Total) / Number of Un	its (Total)			
		(5)	Hours, Number of	f units (3)	```		
7. Co	ourse ad	ministrator's name (1	nention all, if mo	re than one nan	ne)		
	ame:MO	nammed alda i A	AII E-mail <u>and</u>	ayatifu@uOKffK	<u>uk.edu.iq</u>		
The d	ecision a	ims to familiarize itse	lf with forest tree of	entomology and	the most important		
metho	ds of con	bating forest insects i	n Iraq	entonioiogy and	the most important		
9. Te	eaching a	nd Learning Strateg	ies				
Verba	ıl commu	nication with students	and motivation for	or teamwork in t	the learning process		
and us	e of com	munication skills					
10. C	ourse St	ructure					
		Required		. .			
Week	Hours	Learning	Unit or subject	Learning	Evaluation		
		Outcomes	name	methou	methou		
		The location and	classified	Lecture,	Verbal, editorial,		
1	5	importance of	insects	presentations	daily and monthly		
1	5	classified insects		and	tests and		
				discussion	scientific reports		
		Distribution and	Distribution	Lecture.			
		spread of insects in	of insects	presentations	Verbal, editorial,		
2	5	Iraq		and	daily and monthly		
				interactive	scientific reports		
				discussion	scientific reports		
		Exterior of insects	Exterior of	Lecture,	Verbal, editorial.		
	E		insects (head,	presentations	daily and monthly		
3	5		chest,	and	tests and		
			audomen)	discussion	scientific reports		
		Internal anatomy of	Internal	Lecture	Verbal editorial		
4	5	insects: digestive	anatomy of	presentations	daily and monthly		
		insects: digestive	anatomy of	presentations	daily and monthly		

	1	T		1 .	Ι
		system	insects	and interactive discussion	tests and scientific reports
5	5	Evolution and proliferation of insects in the forest	Evolution and proliferation of insects	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
б	5	Insects and environment	Insects and environment: (bio-efficiency, environmental resistance)	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	Clans and varieties	Clans and forest insect varieties	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	Bioequilibrium, environmental resistance	Bioequilibrium, environmental resistance effect - numerical explosions	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Detection and diagnosis	Detection and diagnosis of insect injuries	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Forest insect resistance	Forest insect resistance: indirect methods (physical, biological, agricultural, legislative)	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	Direct methods	Direct methods (mechanical, direct biological, chemical)	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	Integrated resistance	Integrated forest insect	Lecture, presentations	Verbal, editorial, daily and monthly

			res	istance	and	tests and	
					interactive	scientific reports	
					discussion		
13	5	Forest tree insects	For inse eater abse	est tree cts: leaf s - juicy orbents	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
14	5	Miasmic tissue insects	Miasmic tissue insects: foreskin beetles - oncologists		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
15	5	Wood insects	Wood bark t	d insects, and their ypes	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
11.C	ourse Ev	aluation					
The g	rade for	the semester examin	nation i	s (40%), c	livided into (10)) grades for daily	
prepara month	ation, pai ly exams	rticipation, and submit for each exam (15) gr	tting rep ades, au	ports, (30) g nd the grade	grades for month e for the final ex	nly exams, with two am is (60%).	
12.L	earning a	and Teaching Resour	rces				
Required textbooks (curricular books, if any				Lectures prepared by the teacher based on relevant books and references.			
Main references (sources)				Forest Entomology, Sabah Muhammad Swilm, Ismail Najm al-Ma '1981			
Recom	mended	books and references					
(scient	(scientific journals, reports)						
Electro	Electronic References, Websites			Internatio	nal journals incl	uded in Scopus	

Course Description Form 1. Course Name: Natural pastures 2. Course Code: Natural pastures NARA225 3. Semester / Year: Second semester/second year 4. Description Preparation Date: 28/03/2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) (5) Hours, Number of units (3) 7. Course administrator's name (mention all, if more than one name) Name:AKO GHAZI SATTAR E-mail akoghazi@uokirkuk.edu.iq 8. Course Objectives The aim of studying natural pastures is to know the importance and distribution of natural pastures in the Arab world and to study the causes of the deterioration of natural pastures and how to treat them. 9. Teaching and Learning Strategies Verbal communication with students, urging them to work together in the learning process, using written communication skills to increase comprehension, as well as the brainstorming method to attract students' attention, activate the thinking strategy according to the student's ability, and conduct scientific visits to agricultural projects. **10.** Course Structure **Required Learning** Unit or Learning Week Hours **Evaluation method** Outcomes subject name method General introduction Daily and monthly exam, 1 5 knowledge lecture attendance and reports The importance and distribution Daily and monthly exam, 2 5 of natural pastures in the world knowledge lecture attendance and reports and the Arab world Daily and monthly exam, 3 5 knowledge lecture attendance and reports Causes of deterioration of Knowledge, Daily and monthly exam, natural pastures skills and 4 5 lecture attendance and reports attitudes Manifestations of degradation Daily and monthly exam, 5 5 knowledge lecture of natural pastures attendance and reports Geographical plant regions in Knowledge, Daily and monthly exam, the Arab world and their 5 skill and 6 lecture attendance and reports pastoral importance attitude Fodder production in natural Daily and monthly exam, 7 5 knowledge lecture pastures in the Arab world attendance and reports Definition of natural and 5 8 knowledge lecture Daily and monthly exam, artificial grasslands

		Pastoral ecosystem	Knowledge,	1 /	attendance and reports Daily and monthly exam,		
9	5		skill	lecture	attendance and reports		
10	5		Knowledge, skill	lecture	Daily and monthly exam, attendance and reports		
11	5	Some plants of the	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports		
12	5	Poaceae family	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports		
13	5		Knowledge, skill	lecture	Daily and monthly exam, attendance and reports		
14	5	Botanical description of the legume family	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports		
15	5	Some plants of the legume family	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports		
11.Co	11.Course Evaluation						
The grade for the semester examination is (40%), divided into (10) grades for daily							
preparation, participation, and submitting reports, (30) grades for monthly exams, with two							
monthly exams for each exam (15) grades, and the grade for the final exam is (60%).							
12.Learning and Teaching Resources							
Bequired textbooks (curricular books, if one) Lectures prepared by the teacher based on							

Required textbooks (curricular books, if any)	relevant books and references.		
Main references (sources)			
Recommended books and references			
(scientific journals, reports)			
Electronic References, Websites	International journals included in Scopus		

1. Course Name:

Computer/3

2. Course Code:

Comp217

3. Semester / Year:

Second Year/first Semester

4. Description Preparation Date:

30/3/2024

5. Available Attendance Forms:

- 6. Number of Credit Hours (Total) / Number of Units (Total)
 3 hourse / 1
- 7. Course administrator's name (mention all, if more than one name) Name:Basira Abdullah Ahmed Email: baseraabdullah@uokirkuk.edu.iq

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8. Course Objectives

Developing the student's abilities master making tables and writ mathematical equations via computer

9. Teaching and Learning Strategies

Strategy

Course Objectives

- 1- Explanation and clarification
- 2- Lecture method
- 3-Use of computer lab

10. Course Structure

Week	Week Hour Required Learning Outcomes		Unit	Learning	Evaluation
	s		or	method	method

		subje	
		ct	
		name	
3			1
	Microsoft Power Point presentati		
	program - Run Power Point		
	Presentation window - Create		
	presentation - Create a title slid		
	Control the location and size of t		
	text boxes - Font type - Save t		
	presentation - Close a file - Oper		
	stock presentation		
	Add a new slide - move betwe		2
	sildes - delete a silde - repeat a sil		
	- set up pages - design template		
	control slide background - num		
	sindes - insert an image - create		
	buileted slide - create an image a		
	elide		
	Tables Create a layout and t		2
	alida Croata your organization		3
	chart clide Layout (chart) Cro		
	an image and text slide Create		
	blank slide. Change the slide type		
	blank shue - Change the shue type		
	Slide show methods - rearrangi		4
	slides - animation effects - addi		
	slides from another presentation		
	adding audio or video clips - sli		
	transitions		
	Practice timing - slide show - in t		5
	slide show window		
	commentator's notes - handout		
	line spacing - print the presentati		
	file, lecture and exam		6
	Introduction to the Internet - Wh		7
	is the Internet - Its definition, ori		
	and development - How to conne		
	to the Internet - Internet address		
	and URL concepts - Intern		
	specific terminology		

age, lecture, exam Explanation of the inclusion b	8
lecture and exam	
Browsing and search service	9
opening the browser - browsi	
window - hyper links - w	
addresses - changing the start pa	
- canceling the display of imag	
and pages - closing the browser a	
disconnecting browsing, stori	
favorite pages	
Organizing the address list	10
Copying images and texts - Splitti	_
web pages - Printing web page	
Search engines - How to search	
information on the network - Usi	
the search button in the toolbar -	
E-mail services - sending a messa	11
- sending attachments with t	11
message - storing the message	
the drafts folder - reading	
message - reading a messa	
containing an attachment - renlyi	
to the message - passing a messa	
to another user	
Cancel a mossage print a mossa	12
create a folder move a moss	12
from one folder to another sta	
aloctropic addresses in the addre	
book was addresses in the addre	
book - use addresses stored in t	
address book - add a digi	
 Signature - exit the program	10
Microsoft Access - What is	13
database - Definition of Micros	
Access - Terms specific to databas	
 - Running the Microsoft program	
Primary key - save the log - clo	14
the database - display the data	
the table - move between the desi	
view window and the data pa	
view window - enter data into t	
table - change the orientation of t	
data page view window	

	Practical exam, lec	ture exam 15		
11. Cou	urse Evaluation			
Distributing the score out of 100 according to the tasks assigned to the student such as preparation, daily oral, monthly, or written exams, reports etc 12 Learning and Teaching Resources				
Required te	extbooks (curricular books, if any)	Computer basics and off applications (Part Four) / Zi Muhammad Aboudi, Ghassan Han Abdel Majeed, Mustafa Diaa Hassani		
Main refere	ences (sources)			
Recommen (scientific jo	ded books and references ournals, reports…)			
Electronic F	References, Websites	ps://ar.wikipedia.org/wiki/%D9% %D8%A7%D9%8A%D9%83%D8% 1%D9%88%D8%B3%D9%88%D9 81%D8%AA_%D8%A5%D9%83%J %B3%D9%84		



1. Course Name:

Democracy

2. Course Code:

FRDE227

3. Semester / Year:

second semester/ second year

4. Description Preparation Date:

28/03/2024

5. Available Attendance Forms:

Mandatory

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

(1) Hours, Number of units (1)

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

Name:Assist Prof. Basira Abdullah Ahmed Email: <u>baseraabdullah@uokirkuk.edu.iq</u>

8. Course Objectives

Know the importance of studying freedom and democracy.

9. Teaching and Learning Strategies

Verbal communication with students, urging them to work together in the learning process, using written communication skills to increase comprehension, as well as the brainstorming method to attract students' attention, activate the thinking strategy according to the student's ability.

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1	The concept of freedom, the concept of anarchy, the concept of democracy, the historical	Knowled ge	lecture	Daily and monthly exam, attendance and reports
2	1	Forms of the system: indirect	Knowled ge	lecture	Daily and monthly exam, attendance and reports
3	1	Civil,society,	Knowled ge	lecture	Daily and monthly exam, attendance and reports
4	1	The concept of freedom	Knowled ge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports
5	1	The concept of anarchism	knowled ge	lecture	Daily and monthly exam, attendance and reports
6	1	The basic conditions of a democratic system and its	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports

		characteristics	and attitude				
7	1	Features of the democratic system	knowled ge	lecture	Daily and monthly exam, attendance and reports		
8	1	development of the concept of democracy in the Mesopotamian civilization	knowled ge	lecture	Daily and monthly exam, attendance and reports		
9	1	The pillars of democracy, the basic conditions of the democratic system	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
10	1	Features of the democratic system, types democracy	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
11	1	democracy, democracy, concept, and manifestations	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
12	1	Different systems of election	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
13	1	Democracy applications	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
14	1	democratic values and functions	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
15	1	The report on human rights in Islam comprehended and surpassed all hypothetical	Knowled ge, skill	lecture	Daily and monthly exam, attendance and reports		
11.Co	ourse Ev	aluation		·	•		
The gr prepara monthl	The grade for the semester examination is (40%), divided into (10) grades for daily preparation, participation, and submitting reports, (30) grades for monthly exams, with two monthly exams for each exam (15) grades, and the grade for the final exam is (60%).						
12.Le	12.Learning and Teaching Resources						
Required textbooks (curricular books, if any)		Lectures prepared by the teacher based on relevant books and references.					
Main references (sources)		Human Rights and Democracy / Dr. Ghassan Karim Majhab, Amjad Zein Al-Abidin Tohm					
Recommended books and references (scientific journals, reports)			Iraqi academic scientific journals, including				
Electro	nic Refe	erences, Websites	International journals .				

Course Description Form 1. Course Name: English language 2 / elementary level 2. Course Code: ENGL228 3. Semester / Year: Second semester/second year 4. Description Preparation Date: 31/03/2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) 1 hour 7. Course administrator's name (mention all, if more than one name) Name: Berevan Qader Omar Email: beree.omer@gmail.com **Course Objectives** 8.

Teaching this curriculum aims to make the student familiar with the English language as it

is a global language from which the student will get benefit widely in his academic life.

This curriculum is an extension of what the student learned in the first stage.

9. Teaching and Learning Strategies

It is a semi-integrated curriculum for the elementary level that includes the basics

necessary for learning the English language in a simplified way with exercises. It includes

nouns, verbs, verb tenses, interrogatives, prepositions, and expression of quantities.

10. Course Structure							
Week	eek Hours Required Learning Outcomes		Unit or subject name	Learning method	Evaluation method		
1	1	Verb to be (auxiliary verbs)	Knowledge	lecture	Exercise		
2	1	Possessive adjectives	Knowledge	lecture	Exercise		
3	1	Singular and plural	Knowledge	lecture	Exercise		
4	1	Question words	Knowledge	lecture	Exercise		
5	1	Tense of verbs	Knowledge	lecture	Exercise		
6	1	Present simple for elementary level	Knowledge	lecture	Quiz		
7	1	Present continuous	Knowledge	lecture	Exercise		

		for elementary level							
8	1	Adverb of frequency	Knowledge		lecture	Exercise			
9	1	Expression of quantity	Knowledge		lecture	Exercise			
10	1	How many? Some & any	Knowledge		lecture	quiz			
11	1	Past simple for elementary level	Knowledge		lecture	quiz			
12	1	Comparative and superlative	Knowledge		lecture	Exercise			
13	1	Past continuous for elementary level	Knowledge		lecture	Exercise			
14	1	Preposition	Knowledge		lecture	Exercise			
15	1	Irregular verbs	Knowledge		lecture	Quiz			
11.Co	11.Course Evaluation								
Semest	Semester endeavor (40 marks): 15 marks for 15 marks for Fina				onth exam + onth exam + marks)	5 marks for quiz 5 marks for quiz			
12.Le	earning a	and Teaching Resources	5						
			New headway plus (elementary student bo						
Required textbooks (curricular books, if any)			/ written by : Liz and John Soars / Oxfo						
			university press						
Main references (sources)			Cambridge press						
Recommended books and references (scientific journals, reports)			My English library website						
Electronic References, Websites			You tube and some useful websites						
Course Description Form									
--------------------------------	-----------------	--------------------------------------	--	----------------	--	--	--	--	--
1. Co	1. Course Name:								
	<u> </u>		Forest Measuring	ng					
2. (Course C	Code: Natural pastures	EOME211						
3 Se	mester /	Vear	FOMESTI						
5. 50		Fir	st semester/third	vear					
4. De	scription	n Preparation Date:		. jeu					
	L	•	28/03/2024						
5. Av	ailable A	Attendance Forms:							
			Mandatory						
6. Nu	mber of	Credit Hours (Total) /	Number of Uni	ts (Total)					
		(5) Ho	ours, Number of	units (3)	<u>```</u>				
7. Co	ourse adr	ninistrator's name (mei	ntion all, if mor	e than one	name)				
	me: Mai	nal haal E-mail							
ð. Co	to propo	jectives ra Cabonasa andras spaci	alizing in forest	maggirama	nta				
	aching a	nd Learning Strategies	anzing in forest	measureme					
Verba	l commu	nication with students a	nd urging them	to work to	ogether in the learning				
process	s and us	e written communication	on skills to incl	rease assim	ilation as well as the				
method	d of brain	storming to attract stude	ents' attention ar	d activate t	he strategy of thinking				
accord	ing to the	student's ability, and con	nduct scientific v	visits to agri	cultural projects				
10. Co	ourse Str	ucture		<u> </u>	1 5				
Weels	Hanna	Required Learning	Unit or	Learning	Evaluation mathed				
WEEK	nours	Outcomes	subject name	method	Evaluation method				
1	5	Metrology's relationship	Metrology's relationship with other forest sciences	lecture	Daily and monthly exam, attendance and reports				
2	5	Measurement errors	Measurement errors in forest measurements	lecture	Daily and monthly exam, attendance and reports				
3	5	Units used for measurement	Units used for measurement and their systems	lecture	Daily and monthly exam, attendance and reports				
4	5	Tree variables	Tree variables (diameter at dbh, diameter at different levels, veneer. Total Height - Crown Center Height - Crown Length - Crown Width	lecture	Daily and monthly exam, attendance and reports				
5	5	Diameter Measuring	Tree Diameter Measuring Devices	lecture	Daily and monthly exam, attendance and reports				
6	5	Tree veneer measurement	Tree veneer measurement devices	lecture	Daily and monthly exam, attendance and reports				

7	5	Height Measuring	Tree Height Measuring Devices	lecture	Daily and monthly exam, attendance and reports
8	5	Methods of extracting	Methods of extracting tree shape - shape factor - division factor - shape point factor	lecture	Daily and monthly exam, attendance and reports
9	5	Tree Size	Tree Size - Wooden Trunks - Standing Trees	lecture	Daily and monthly exam, attendance and reports
10	5	Methods of Estimating	Methods of Estimating Tree Size Mathematical Equations, Taping Equations, Graphic Method	lecture	Daily and monthly exam, attendance and reports
11	5	Size tables	Size tables (local - standard - shape factor tables) in both mathematical and graphic ways	lecture	Daily and monthly exam, attendance and reports
12	5	Leg analysis method	Leg analysis method (growth in the country - growth in height - growth in size) Tree variables (tree schedules - base area - average diameter - height - size	lecture	Daily and monthly exam, attendance and reports
13	5	Production Schedules - Weights Schedules	Production Schedules - Weights Schedules	lecture	Daily and monthly exam, attendance and reports
14	5	inventory	inventory	lecture	Daily and monthly exam, attendance and reports
15	5	(simple random inventory - class inventory)	(simple random inventory - class inventory)	lecture	Daily and monthly exam, attendance and reports
11.Co	ourse Ev	aluation		•	
The grant prepara month	rade for ation, par y exams	the semester examination ticipation, and submitting for each exam (15) grade	on is (40%), d g reports, (30) g es, and the grade	ivided into rades for m for the fina	(10) grades for daily onthly exams, with two al exam is (60%).
12.Le	earning a	and Teaching Resources	T (41
Requir	Required textbooks (curricular books, if any)			prepared by books and re	the teacher based on eferences.
Main r	eferences	s (sources)			
Recom	mended	books and references			
(scient	itic journ	als, reports)	T		la included in Comme
Electro	mic Kefe	rences, websites	Internati	ionai journa	is included in Scopus

Course Description Form								
1. Course Name:								
			Forest investme	nt				
2. Co	ourse Co	de:						
			FOUT312					
3. Se	mester /	Year:						
4 D	•	Fir	st semester/third	lyear				
4. De	scription	h Preparation Date:	21/02/2024					
5 Av	ailahle /	Attendance Forms	31/03/2024					
J. AV		Attendance Forms.	Mandatory					
6. Nu	mber of	Credit Hours (Total) /	Number of Unit	ts (Total)				
		(5) Ho	ours, Number of	units (3)				
7. Co	urse adı	ninistrator's name (mer	ntion all, if mor	e than one i	name)			
Name:	Lecture	r Dr. Osamah Ibrahim Ah	med Email: os	sama_alzaidb	agy@uokirkuk.edu.iq			
8. Co	urse Ob	jectives						
The stu	ident's k	nowledge of forest engine	eering, which de	eals with all	engineering works and			
constru	ictions th	at take place within the	forest land or its	s surroundin	gs, which aim to serve			
the for	est and f	facilitate benefiting from	forest activities	s, including	forest roads and their			
annexe	s, and the	en service and investmen	t buildings and f	orest protec	tion systems.			
9. Te	aching a	nd Learning Strategies						
1. Iden	tify the p	productive side of forests.	and their type					
2. Iden	tify the c	ous of investing in forest	is and their types	s. rimming tru	nke			
4 Iden	tifving th	be vards collecting and se	lling wood and t	their econom	nic feasibility			
5 Lear	n about y	wood preservation proces	ses		ne reasionity.			
10. Co	ourse Sti	ructure						
	TT	Required Learning	Unit or	Learning				
Week	Hours	Outcomes	subject name	method	Evaluation method			
1	5	An introductory overview of forest investment	Knowledge	lecture	Daily reports			
2	5	cut down trees	Knowledge and skills	lecture	Daily exam and reports			
3	5	Processing cut logs	Knowledge and skills	lecture	Daily exam and reports			
4	5	Transporting logs	Knowledge and skills	lecture	Daily exam and reports			
5	5	Timber collection yards	Knowledge and skills	lecture	Daily exam and reports			
6	5	Storage and drying of wood	Knowledge and skills	lecture	Daily exam and reports			
7	5	Various cuts in forests	Knowledge and skills	lecture	Daily exam and reports			
8	5	Uses of woody branches and roots	Knowledge and skills	lecture	Daily reports			

9	5	Tourism investment	Knowledge	lecture	Daily reports	
10	5	Educational investment	Knowledge	lecture	Daily reports	
11	5	Preventive investment	Knowledge	lecture	Daily reports	
12	5	Forest imports	Knowledge	lecture	Daily exam and reports	
13	5	Carbon harvesting within forests	Knowledge and skill	lecture	Daily exam and reports	
14	5	Sustainability in forests	Knowledge and skill	lecture	Daily exam and reports	
15	5	Student reports	Knowledge	lecture	Daily reports	
11.Course Evaluation						
Semest	ter endea	vor (40 marks): 25 marks	The theoretic	cal part: 20 ma	rks Two monthly	
			exams, 5 m	arks Reports		
		15 marks	Practical par	t: 10 marks m	onthly exams, 5 marks	
			student prac	ctical activity		
Final q	uest (60	marks): 40 marks theoret	ical questions	s, 20 marks pra	ctical questions	
12.Le	earning a	and Teaching Resources	5			
Requir	ed textbo	ooks (curricular books, if	any) (Fores	(Forest Investment) Book		
Main r	eference	s (sources)	(Fores	(Forest products investment) Book		
Recom	Recommended books and references			International periodicals and magazines in		
(scientific journals, reports)			Clarvit	Clarvit and Scopus containers		
Electronic References, Websites			Intern Clarv	International periodicals and magazines in Clarvit and Scopus containers		

Course Description Form 1. Course Name: Forest nurseries 2. Course Code: Natural pastures FONU313 3. Semester / Year: First semester/third year 4. Description Preparation Date: 28/03/2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) (5) Hours, Number of units (3) 7. Course administrator's name (mention all, if more than one name) Name: AKO GHAZI SATTAR E-mail akoghazi@uokirkuk.edu.iq 8. Course Objectives . Producing good seedlings of excellent varieties and seedlings of large plants. Paying attention to high-yielding mothers, with their suitability to environmental conditions and their freedom from diseases and insects, to represent the first basis for the spread of the species, its preservation, and the expansion of its cultivation by increasing the resulting numbers through vegetative propagation. 9. Teaching and Learning Strategies Verbal communication with students, urging them to work together in the learning process, using written communication skills to increase comprehension, as well as the brainstorming method to attract students' attention, activate the thinking strategy according to the student's ability, and conduct scientific visits to agricultural projects. **10.** Course Structure **Required Learning** Unit or Learning Week **Evaluation method** Hours method Outcomes subject name General introduction Daily and monthly exam, 1 5 knowledge lecture attendance and reports Chapter One: Forest seed trees -Daily and monthly exam, 2 5 knowledge lecture seeds, fruits, types of seeds attendance and reports Chapter Two: Seed collection, Daily and monthly exam, 3 5 knowledge lecture selection of seed trees, seed attendance and reports trees , forest production areas, seed Knowledge, Daily and monthly exam, collection time, seed collection 4 5 skills and lecture attendance and reports methods, seed collection tools. attitudes Chapter Three: Seed extraction Daily and monthly exam, 5 5 knowledge methods, seed extraction lecture attendance and reports devices Chapter Five: Seed propagation, Knowledge, methods and types of

lecture

Daily and monthly exam,

skill and

attitude

6

5

propagation, types of trees and

their propagation, uses of

growth regulators.

7	5	, factors affecting urban	knowledge	lecture	Daily and monthly exam,			
/	5	propagation	kilowieuge	lecture	attendance and reports			
8	5	Chapter Six: Nurseries, choosing the nursery site, nursery area, nursery planning, nursery fencing, nursery land preparations, individualization beds, nursery buildings.	knowledge	lecture	Daily and monthly exam, attendance and reports			
9	5	Chapter Seven: Vessels	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports			
10	5	Chapter Eight: Prose, time of prose, methods of prose, types of prose, depth of prose,	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports			
11	5	maintenance of shrines	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports			
12	5	Nursery expenses or costs - the costs of producing seedlings	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports			
13	5	Factors affecting nurseries	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports			
14	5	Types of nurseries	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports			
15	5	Causes of deterioration in some nurseries	Knowledge, skill	lecture	Daily and monthly exam, attendance and reports			
11.Co	ourse Ev	aluation						
The gr prepara monthl	The grade for the semester examination is (40%), divided into (10) grades for daily preparation, participation, and submitting reports, (30) grades for monthly exams, with two monthly exams for each exam (15) grades, and the grade for the final exam is (60%)							
12.Le	earning	and Teaching Resources	-					
Required textbooks (curricular books, if any) $\begin{vmatrix} I \\ r \end{vmatrix}$				prepared by books and re	the teacher based on eferences.			
Main r	eference	s (sources)						
Recom	Recommended books and references							
(scient	ific jourr	nals, reports)						
Electro	nic Refe	erences, Websites	Interna	International journals included in Scopus				

	Course Description Form								
1. Co	1. Course Name:								
			Forest tree tree	S					
2. Co	urse Co	de:							
			FOPH314						
3. Sei	mester /	Year:	· · //	1					
4 Da	a a min ti a a	First Propagation Data:	st semester/ Third	i year					
4. De	scription	rreparation Date:	28/03/2024						
5. Av	ailable /	Attendance Forms:	20/03/2024						
			Mandatory						
6. Nu	mber of	Credit Hours (Total) /]	Number of Unit	ts (Total)					
		(5) Ho	ours, Number of	units (3)					
7. Co	urse adı	ninistrator's name (mer	ntion all, if mor	e than one	name)				
Na	me:AK(O GHAZI SATTAR	E-mail akoghaz	i@uokirkuk	.edu.iq				
8. Co	urse Ob	jectives							
. The c	ourse ain	ns to introduce the studer	nt to the processe	es that occu	r within plants, such as				
photos	ynthesis,	respiration, and the re-	elationship of v	water and j	plants to transpiration				
process	ses								
9. Te	aching a	nd Learning Strategies	ain a theorem to suc	ult to coth ou .	u the learning measure				
verbal	commun	communication skills	to increase of	rk logelher	on as well as the				
brainst	orming r	nethod to attract students	'attention activ	ate the thinl	ving strategy according				
to the s	student's	ability and conduct scien	ntific visits to ag	ricultural pr	rojects				
10. Co	ourse Sti	ucture		<u>, incuitatut pi</u>					
***	TT	Required Learning	Unit or	Learning					
Week	Hours	Outcomes	subject name	method	Evaluation method				
1	5	General introduction	knowledge	lecture	Daily and monthly exam,				
-	5	Plant anatomy	linio in leage	lootare	attendance and reports				
2	5	r lant anatomy	knowledge	lecture	attendance and reports				
2	5	Photosynthesis	knowladza	locture	Daily and monthly exam,				
3	5		knowledge	lecture	attendance and reports				
1	5	Breathing	Knowledge,	laatura	Daily and monthly exam,				
4	5		attitudes	lecture	attendance and reports				
5	5	Carbohydrates	lucitudes	1	Daily and monthly exam,				
3	3		knowledge	lecture	attendance and reports				
6	Leaf pollution in autumn Knowledge, Daily and monthly exam.								
0	5		attitude	lecture	attendance and reports				
7	5	Fats, terpenes and natural	knowladza	lactura	Daily and monthly exam,				
/	3	compounds	KIIOWIEUge	lecture	attendance and reports				
8	5	Nitrogen compounds	knowledge	lecture	Daily and monthly exam,				
					attenuance and reports				

9	5	Mineral nutrition and salt absorption	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
10	5	- Transport in plants	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
11	5	The relationship between water and plants - transpiration	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
12	5	Absorption, transport and their relationship with water	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports	
13	5	Sexual reproduction in gymnosperms	Knowledge, skill		lecture	Daily and monthly exam, attendance and reports	
14	5	Sexual reproduction in covered seeds	Knowledge, skill		lecture	Daily and monthly exam, attendance and reports	
15	5	So the evidence is valid	Knowledge, skill		lecture	Daily and monthly exam, attendance and reports	
11.Co	ourse Ev	aluation					
The graph of the g	The grade for the semester examination is (40%), divided into (10) grades for daily preparation, participation, and submitting reports, (30) grades for monthly exams, with two monthly exams for each exam (15) grades, and the grade for the final exam is (60%).						
12.Lt	arning a	and Teaching Resources		T (11	.1 . 1 1 1	
Required textbooks (curricular books, if any)			relevant b	prepared by books and re	the teacher based on ferences.		
Main r	Main references (sources)						
Recommended books and references							
(scient	(scientific journals, reports)						
Electronic References. Websites				International journals included in Scopus			

Course Description Form					
1. Course Name:					
Forest Policy					
2. Course Code:					
FOPO315					
3. Semester / Year:					
First semester/third year					
4. Description Preparation Date:					
29/03/2024					
5. Available Attendance Forms:					
Mandatory					
6. Number of Credit Hours (Total) / Number of Units (Total)					
(5) Hours, Number of units (3)					
7. Course administrator's name (mention all, if more than one name)					
Name:MOHAMMED ALBAYATI E-mail <u>albayatiiu@uokirkuk.edu.iq</u>					
8. Course Objectives					
The decision aims to inform forestry policy science and its role between Gabonese science and society					
9. Teaching and Learning Strategies					

Verbal communication with students and motivation for teamwork in the learning process and use of communication skills...

10. Co	10. Course Structure								
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method				
1	2	Forestry Policy Position in State Policy	Forestry Policy	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports				
2	2	Natural foundations of forest policy	Natural foundations of forest policy	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports				
3	2	Historical overview of the emergence of forest policy science	Historical overview of the emergence	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports				
4	2	Introduction to forest	Gabonese	Lecture,	Verbal, editorial,				

		policy science and a course between Gabonese science and society	science and society	presentations and interactive discussion	daily and monthly tests and scientific reports
5	2	Forest Policy Duties and Objectives	Duties and Objectives	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	2	Contributors to forest policy goals	forest policy goals	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	2	Means of achieving forest policy	Means of achieving	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	2	forestry policy	Types forestry policy	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	2	Roles that have passed through forests over time	forests over time	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	2	Direct and indirect forest benefits	forest benefits	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	2	Forests and other related sciences	Forests related sciences	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	2	Iraq's forests and world's forests and data	Iraq's forests and world's forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports

13	2	Scientific production and consumption of forest products	cons of pr	sumption forest oducts	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
14	2	The most important wood products consumed in Iraq	in v pr cons	nportant wood oducts sumed in Iraq	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
15	2	Economic foundations of Iraq's forest policy and forest laws	Iraq's forest policy and forest laws		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11.C	ourse Ev	aluation				
The g	rade for	the semester examination	tion	is (40%),	divided into (10) grades for daily
prepara	ation, pai	ticipation, and submitting for each exam (15) gradient	ing re	ports, (30) and the are) grades for mon	thly exams, with two exam is (60%)
12.Le	earning	and Teaching Resource	$\frac{1}{2}$ es	ind the gra		CXam 15 (0070).
Requir	ed textbo	ooks (curricular books,	if any			
Main references (sources)			Forestry Policy, Abdul Mahdi Gabr, 1982			
Recommended books and references						
(scient	(scientific journals, reports)					
Electro	onic Refe	erences, Websites		International journals included in Scopus		

Course Description Form									
1. Course Name:									
			Forest Pathole	ogy					
2. Co	ourse Co	de:							
		T 7	FOPA316						
3. Se	mester /	Year:	Tingt going of an /Th						
1 Dc	corintio	n Proporation Data:	First semester/ I m	Ird year					
4. De	scriptio	ii r reparation Date.	29/03/2024	1					
5. Av	vailable /	Attendance Forms:	271031202	r					
			Mandatory	7					
6. Nu	imber of	f Credit Hours (Total)) / Number of U	nits (Total)					
		(5)	Hours, Number o	of units (3)					
7. Co	ourse ad	ministrator's name (n	nention all, if mo	ore than one na	me)				
Na	me:MO	HAMMED ALBAYA	TI E-mail <u>al</u>	<u>bayatiiu@uokirl</u>	<u>kuk.edu.iq</u>				
8. Co	ourse Ob	ojectives			1 1 0				
The d	ecision a	aims to introduce fore	estry pathology a	and the most in	nportant methods of				
comba	ting fore	stry diseases in Iraq							
9. It	aching a 1 commu	ind Learning Strategi	and motivation f	for teamwork in	the learning process				
and us	e of com	munication skills			the learning process				
10. C	ourse St	ructure	T T •4	T •					
Week	Hours	Required Learning	Unit or	Learning	Evaluation				
		History of forest	forest	Lecture	methou				
		pathology	pathology	presentations	Verbal, editorial,				
1	5	I	1	and	daily and monthly				
				interactive	tests and scientific				
				discussion	reports				
		Importance of	Forest Tree	Lecture,	Verbal editorial				
	_	Forest Tree	Diseases	presentations	daily and monthly				
2	5	Diseases		and	tests and scientific				
				interactive	reports				
		Losses caused by	diseases	L ecture					
		forest diseases	Losses caused	presentations	Verbal, editorial,				
3	5			and	daily and monthly				
				interactive	tests and scientific				
				discussion	reports				
		Types of live and	live and non-	Lecture,	Verbal, editorial,				
4	5	non-live pathogens	live	presentations	daily and monthly				
			pathogens	and	tests and scientific				

				interactive discussion	reports
5	5	Stages of disease development and detection	disease development	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	Wood rot fungi and trees	Wood rot fungi	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	Colored fungi for wood and wood trees	Colored fungi for wood	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	The impact of environmental factors on the development of plant disease	environmental factors on the development of plant disease	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Tree pathology diseases agent	Tree pathology diseases agent	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Diseases caused by white fungi, cystic, bazidi, deficient	white fungi, cystic, bazidi, deficient	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	Diseases caused by Miroheiza and their types	Miroheiza and their types	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	Diseases caused by bacteria	Diseases by bacteria	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
13	5	Diseases caused by	Diseases by	Lecture,	Verbal, editorial,

		viruses	V	iruses	presentations	daily and monthly
					and	tests and scientific
					interactive	reports
					discussion	
		Diseases caused by nematodes	Dise nen	ases by natodes	Lecture, presentations	Verbal, editorial,
14	5		-		and interactive discussion	daily and monthly tests and scientific reports
15	5	Diseases caused by floral plants	Dise flora	ases by al plants	Lecture, presentations and	Verbal, editorial, daily and monthly
					interactive discussion	reports
11.C	ourse Ev	aluation				
The grade for the semester examination preparation, participation, and submitting re- monthly exams for each exam (15) grades a			ation i ing rej ades, a	is (40%), ports, (30) nd the grac	divided into (1 grades for mont le for the final e	0) grades for daily hly exams, with two xam is (60%).
12.Le	12.Learning and Teaching Resources					
Required textbooks (curricular books, if any			Lectures prepared by the teacher based on relevant books and references.			
Main references (sources)			Atlas Forest Disease 2020			
Recommended books and references (scientific journals, reports)						
Electro	onic Refe	erences, Websites		Internati	onal journals inc	cluded in Scopus

Course Description Form						
1. Course Name:						
Remote sensing						
2. Course Code:						
RESE317						
3. Semester / Year:						
First semester/ third year						
4. Description Preparation Date:						
31/03/2024						
5. Available Attendance Forms:						
Mandatory						
6. Number of Credit Hours (Total) / Number of Units (Total)						
(5) Hours, Number of units (3)						
7. Course administrator's name (mention all, if more than one name)						
Name: Berevan Qader Omaremail: beree.omer@gmail.com						
8. Course Objectives						
Providing the agricultural student with specialized knowledge and applied skills in the						

science of remote sensing (remote sensing), because of the importance of this modern

science in all scientific fields, especially the field of agriculture and forestry.

9. Teaching and Learning Strategies

The strategy includes an integrated definition of the concept of remote sensing, or what is called remote sensing, and then studying the types of satellites and their features, as well as a study of the properties of the images captured by these satellites, and also how to upload images of the study area and analyze them in a way that suits the desired study or research.

10. Course Structure								
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method			
1	5	Introduction of remote sensing and its history then a brief information about the USGS	Knowledge	lecture	Daily exam and reports			
2	5	Remote sensing model and its physical base and how to create an account on USGS	Knowledge and skills	lecture	Daily exam and reports			

3	5	Remote sensing from earth and space and how to download images	Knowledge and skills	lecture	Daily exam and reports	
4	5	Properties of the information collected by remote sensing devices and how to prepare the image for study	Knowledge and skills	lecture	Daily exam and reports	
5	5	The colure theory and how to combine the bands	Knowledge and skills	lecture	Daily exam and reports	
6	5	How to analyze the data	Knowledge and skills	lecture	Daily exam and reports	
7	5	Spectral reflectivity properties of plants	Knowledge and skills	lecture	Daily exam and reports	
8	5	Spectral reflectivity properties of soil and subset the study area	Knowledge and skills	lecture	Daily reports	
9	5	Spectral reflectivity properties of water and classifying the images (supervised classification)	Knowledge and skills	lecture	Daily exam and reports	
10	5	Types of satellite and unsupervised classification	Knowledge	lecture	Daily exam and reports	
11	5	American, French and Indian satellite and measuring the NDVI	Knowledge	lecture	Daily exam and reports	
12	5	Properties of the collected images	Knowledge	lecture	Daily exam and reports	
13	5	The radar and photographic sensors	Knowledge and skill	lecture	Daily exam and reports	
14	5	Enhancing the data	Knowledge and skill	lecture	Daily exam and reports	
15	5	Classifying the data	Knowledge and skill	lecture	Daily exam and reports	
11.Co	ourse Ev	valuation				
Semester endeavor (40 marks): 25 marks The theoretical part: 20 marks Two monthly						
exams, 5 marks Reports						
15 marks Practical part: 10 marks monthly exams, 5 marks						
student practical activity						
12 Learning and Teaching Personage						
Required textbooks (curricular books, if any) (Fundemental of remote sensing) Book by Dr. jumma dawood						
L						

Main rafarances (sources)	Geographical information system (practical application in geographic analyzing) Book		
Wall references (sources)	application in geographic analyzing) book		
	By omar abdullah al qasab		
Recommended books and references	The series details and series (USCS)		
(scientific journals, reports)	The united state geological survey (USGS)		
Flastronia Pafaranaas Wahsitas	International periodicals and magazines in		
Electronic References, websites	Clarvit and Scopus containers		

Course Description Form

1.	Course Name:
----	--------------

Wild animals

2. Course Code:

WIAN321

3. Semester / Year:

Second Semester/ third year

4. Description Preparation Date:

2024-3-30

5. Available Attendance Forms:

Mandatory

6. Number of Credit Hours (Total) / Number of Units (Total) 5 Hours / 3 Unit

7. Course administrator's name (mention all, if more than one name) Name: Mohammed Madhi Zinalabidin Email: mehmetmadhi@uokirkuk.edu.iq

8. Course Objectives

	-				
Course Objectives		• The student gets to know the basic principles of wild animals			
		through a brief knowledge of:			
		 Introducing the student to wild animals and migratory wild birds 			
		• As well as identifying the types of forests and the ability to			
		design artificial reserves and create atmospheres Close to its			
		natural atmosphere			
9. Teach	hing a	nd Learning Strategies			
Strategy Prepa princi • Mak and le And th		 Preparing a student with a brief knowledge of the basic principles of wild animals through a brief knowledge of: Make the learner able to distinguish between wild animals and learn about their ways of living in their environments And their original habitats. 			

10. Course Structure

Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
1	2	Learn about the	The introduction	Lecture,	Oral and
		introduction and	and definition of	Demonstratio	written
		definition of wild	wild animals and	and interactiv	tests, daily
		animals and a	brief idea about	discussion	and monthl

		briefides shout	foggila		nnatical
		brief idea about	IOSSIIS		practical
		TOSSIIS			tests, and
					scientific
-	-				reports
2	2	Learn about	Fishing and	=	=
		fishing and its	development		
		development	over time		
		over time			
3	2	Identify the	The relationship	=	=
		relationship of	wildlife science		
		wildlife science	to other sciences		
		to other sciences			
4	2	Identifying the	The role of wild	=	=
		role of wild	animals in		
		animals in	forests and		
		forests and	animal ecology		
		animal ecology –	some		
		some	terminology		
		terminology			
5	2		Exam	=	=
6	2	Identify the	The factors that	=	=
	-	factors that help	help the spread		
		the spread of	of animals and		
		animals and the	the factors that		
		factors that limit	limit the spread		
		the spread of	of animals		
		the spread of	of animals		
7	2	allillais Idontifring wild	Wild animals in		
,	2	identifying wild	Will diffilled Sill	_	_
		ammais minaq	ITaq		
8	2	Loarn about	Animal		
0	2	animal	classification	_	
		allilla	And acientific		
		classification	And scientific		
		And scientific	nomenclature		
0		nomenclature			
9	2	Identify animal	Animal variation	=	=
		variation and	and classify the		
		classify the	animal world		
		animal world			
10	2		Exam	=	=
11	2	Learn about	Some suggestions	=	=
		some	for developing		
		suggestions for	the idea of wild		

· · · · · · · · · · · · · · · · · · ·							
		developing the	anim	als among			
		animals among	the p	leople			
		the people					
12	-						
12	2	Identify birds and	Birds	and bird	=	=	
		migration	mgra				
13	2	Identify the	The f	actors that	=	=	
		factors that	nega	tively affect			
		negatively affect	wild	animals and			
		wild animals and	study	y the			
		study the	bene	s of wild			
		harms of wild	anim	als			
		animals	••••••				
14	2	Identify the role	the ro	ole	=	=	
		of forests,	of for	ests,			
		agricultural and	agric	ultural and			
		sheltering wild	shelt	ering wild			
		animals	anim	als			
15	2	Identify the	the se	cientific	=	=	
		scientific	envii	ronmental			
		environmental	facto	rs affecting			
		wild animals	wiid	animais			
11. (Course E	Evaluation					
Distribu	ting the	score out of 100 acc	ording	to the tasks as	signed to the stu	ident such as	
daily pr	eparation	n, daily oral, monthly,	or writ	ten exams, repo	orts etc		
12. L	12. Learning and Teaching Resources						
Required textbooks (curricular books, if any)							
Main ref	Main references (sources)						
Recomm	nended	books and refer	ences	A journey into	the animal world		
(scientifi	c journals	s, reports)		Atlas of Anima	ya ls Dr. Fadia Kanh	oush	
Electron	ic Refere	nces, Websites					

Course Description Form							
1. Course Name:							
			Afforestation				
2. Co	ourse Co	de:					
2 0	4 1	X 7	PLAN322				
3. Se	mester /	Year:	nd competer/Thi	rd waar			
1 Do	scription	Preparation Date:		iu year			
4. DC	scription	i i i cparation Date.	28/03/2024				
5. Av	ailable A	Attendance Forms:	20/03/2021				
			Mandatory				
6. Nu	mber of	Credit Hours (Total) /]	Number of Uni	ts (Total)			
		(5) Ho	ours, Number of	units (3)			
7. Co	urse adı	ninistrator's name (mer	ntion all, if mor	e than one	name)		
Na	me:AK(O GHAZI SATTAR	E-mail akoghaz	i@uokirkuk	.edu.iq		
8. Co	urse Ob	jectives					
Affores	station co	ontributes to improving a	ir quality and red	lucing soil e	erosion while		
mitigat	ing the e	ffects of climate change	111 5	• • • •	1		
Plantin	g 50 bil	lion trees across the Mic	ddle East 1s equ	ivalent to r	eclaiming 200 million		
hectare	s of degi	aded land.					
9. Ie Verbel	acting a	no Learning Strategies	aing them to we	rlz togathar	in the learning process		
verbai	written	communication skills	to increase of	omprehensi	on as well as the		
brainst	orming r	nethod to attract students	' attention activ	ate the thin	king strategy according		
to the s	student's	ability, and conduct scien	ntific visits to ag	ricultural pr	oiects.		
10. Co	ourse Sti	ructure		iiouituiui pi			
		Required Learning	Unit or	Learning			
Week	Hours	Outcomes	subject name	method	Evaluation method		
1	5	General introduction	knowledge	lecture	Daily and monthly exam, attendance and reports		
2	5	Artificial afforestation	knowledge	lecture	Daily and monthly exam, attendance and reports		
3	5	Afforestation	knowledge	lecture	Daily and monthly exam, attendance and reports		
4	5	Afforestation goals	Knowledge, skills and attitudes	lecture	Daily and monthly exam, attendance and reports		
5	5	Bare-rooted seedlings and covered seedlings (surrounded by the dirt clod)	knowledge	lecture	Daily and monthly exam, attendance and reports		
6	5	Preparing the planting sites	Knowledge, skill and attitude	lecture	Daily and monthly exam, attendance and reports		
7	5	Planting distances and planting plan	knowledge	lecture	Daily and monthly exam, attendance and reports		

8	5	Selection of species for afforestation	kn	owledge	lecture	Daily and monthly exam, attendance and reports
9	5	Gymnosperm planting methods and angiosperm planting methods	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
10	5	Afforestation in natural forests	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
11	5	Windbreaks and protective package	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
12	5	Afforestation to stabilize sand	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
13	5	Afforestation in Iraq	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
14	5	Sand stabilization methods	Kn	owledge, skill	lecture	Daily and monthly exam, attendance and reports
15	5	Windbreak and protective package	Knowledge, skill		lecture	Daily and monthly exam, attendance and reports
11.Co	ourse Ev	aluation				
The gr	ade for	the semester examination	on is	(40%), d	ivided into	(10) grades for daily
prepara	ation, pai	rticipation, and submitting	g repo	orts, (30) g	rades for mo	onthly exams, with two
monthl	y exams	for each exam (15) grade	es, an	d the grade	for the fina	l exam is (60%).
12.Le	earning a	and Teaching Resources	5	ſ		
Required textbooks (curricular books, if any)			Lectures prepared by the teacher based on relevant books and references.			
Main r	Main references (sources)					
Recom	mended	books and references				
(scienti	ific journ	als, reports)				
Electro	onic Refe	erences, Websites		Internati	onal journa	ls included in Scopus

Course Description Form							
1. Course Name:							
			Forest Measur	ring			
2. Co	ourse Co	de:					
		T 7	WAPE323				
3. Se	mester /	Year:	a and a amagtan/T	hind man			
4 D	corintio	n Propagation Data:	cond semester/1	nird year			
4. De	scriptio	ii r reparation Date.	29/03/2024	L			
5. Av	vailable /	Attendance Forms:	271031202				
			Mandatory	7			
6. Ni	umber of	f Credit Hours (Total)) / Number of U	nits (Total)			
		(5)	Hours, Number o	of units (3)			
7. Co	ourse ad	ministrator's name (n	nention all, if mo	ore than one na	me)		
Na	me:MO	HAMMED ALBAYA	TI E-mail <u>al</u>	<u>bayatiiu@uokirl</u>	<u>kuk.edu.iq</u>		
8. Co	ourse Ob	ojectives					
The d	ecision a	aims to introduce fore	estry pathology a	and the most in	nportant methods of		
comba	ting fore	stry diseases in Iraq					
9. 10 Varba	aching a	and Learning Strategi	es	Con toomarion in	the learning process		
verba	a of com	munication with students	and motivation I	or teamwork in	the learning process		
		mumeation skins					
10. C	ourse St	ructure					
Week	Hours	Required Learning	Unit or	Learning	Evaluation		
		Untroduction to	subject name	L octuro	method		
		Introduction to	hasing and	presentations	Verbal, editorial,		
1	5	important basins	rivers	and	daily and monthly		
1	5	and rivers	110015	interactive	tests and scientific		
				discussion	reports		
		River Basin Land	River Basin	Lecture,	Varbal aditation		
		Problems	Land	presentations	daily and monthly		
2	5			and	tests and scientific		
				interactive	reports		
				discussion			
		Nature's water and	water and	Lecture,	Verbal, editorial,		
2	5	energy cycle	energy cycle	presentations	daily and monthly		
5	5			and	tests and scientific		
				discussion	reports		
		Water balance in	Water balance	L ecture	Verbal editorial		
4	5	drainage hasing	water balance	presentations	daily and monthly		
		Grannage Dasinis		and	tests and scientific		
L	I	1					

				interactive discussion	reports
5	5	Aquatic drainage basin forms	Aquatic forms	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	Rainfall	Rainfall types	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	Filtration and water movement on the ground	Filtration and water movement	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	Runoff	Runoff	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Flow measurement in rivers	Flow in rivers	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Management of vegetation in aquatic areas	Management of aquatic areas	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	forestry and water	forestry and water	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	Erosion operations and their control	Erosion control	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
13	5	Forests and the quality of the water	Forests and water	Lecture, presentations	Verbal, editorial, daily and monthly

		they produce	pro	oduce	and	tests and scientific
					interactive	reports
					discussion	
14	5	Forests and flood types	Fore fl	ests and lood	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
15	5	Sources of river basins planning and application	b plann appl	asins iing and ication	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11.C	ourse Ev	aluation				
The grade for the semester examination is (40%), divided into (10) grades for preparation, participation, and submitting reports, (30) grades for monthly exams, monthly exams for each exam (15) grades, and the grade for the final exam is (60%).					0) grades for daily hly exams, with two xam is (60%).	
12.Learning and Teaching Resources						
Required textbooks (curricular books, if any		Lectures prepared by the teacher based on relevant books and references.				
Main r	Main references (sources)			Forest Me	easuring	
Recom (scient	mended ific jourr	books and references nals, reports)				

Electronic References, WebsitesInternational journals included in Scopus

Course Description Form

1.	Course	e Name:			
		Design and a	nalysis of agricultural	experiments	
2.	Course	e Code:			
			EXDE324		
3.	Semes	ter / Year:			
		Se	cond season / third yea	ar	
4.	Descri	ption Preparation D	Date:		
			Y • Y £_W_1V		
5.	Availa	ble Attendance Form	IS:		
	NT 1		weekly	· · · · · · · · · · · · · · · · · · ·	
6.	Numbe	er of Credit Hours (1	$\frac{\text{otal}}{20 \text{ hour } / 2 \text{ unit}}$	nits (Iotal)	
7	Cours	e administrator's n	ame (mention all i	f more than on	e name)
Name:	Asst. P	rof. Dr. Ismail Younis	Hasan Email= isr	nail.vounis@uoki	kuk.edu.iq
8.	Course	Objectives			•
0	Ohioati	• Learn about som	a statistical concents		
Course	Objectiv	Increasing student	ts' knowledge of impo	rtant statistical mea	sures, which
		are measures of ce	ntral tendency and mea	sures of dispersion	,
		• Students' knowle	edge of methods for des	igning and analyzin	ng agricultural
		experiments, inclu	ding one-way experime	ents	vicenificance
		Identify methods Identify methods	for designing factorial	experiments	significance
0	Teachi	ng and Learning Str		experiments	
).	Teach	Evaluation and elarific	ation		
Strateg	у .	Giving lectures	ation		
	•	Use presentation tools			
	•	Play videos and photos			
	•	Daily and monthly exan	ns		
10. C	ourse S	Structure			
Week	Hours	Required Learning	Unit or subject	Learning	Evaluation
		Outcomes	name	method	method
1	5	Some statistical terms	Some statistical terms		
		and concepts related	and concepts related	Lecture,	daily and
		to the science of	designing and	and interactive	monthly
		designing and	analyzing	discussion	practical tests,
	_	anaryzing experiments	experiments	T = = ť	
2	5	Completelv	Completely	Lecture, demonstrations	daily and
		randomized design	randomized design	and interactive	monthly practical tests
2	•			discussion	dollar or 1
5	0	Completely	Completely	Lecture,	monthly
		randomized design	randomized design	demonstrations	practical tests.

				and interactive discussion	
4	5	Completely randomized design	Completely randomized design	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
5	5	Multiple comparisons of means	Multiple comparisons of means	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
6	5	Multiple comparisons of means	Multiple comparisons of means	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
7	5	Randomized complete block design	Randomized complete block design	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
8	5	Randomized complete block design	Randomized complete block design	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
9	5	Latin square design	Latin square design	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
10	5	Multi-factor experiments	Multi-factor experiments	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
11	5	Multi-factor experiments	Multi-factor experiments	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
12	5	Multi-factor experiments	Multi-factor experiments	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
13	5	Multi-factor experiments	Multi-factor experiments	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
14	5	Multi-factor experiments	Multi-factor experiments	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
15	5	Analysis of covariance	Analysis of covariance	Lecture, demonstrations and interactive discussion	daily and monthly practical tests,
11.	Course	Evaluation			
Distrib prepai	outing the ation, da	e score out of 100 acco ily oral, monthly, or w	rding to the tasks assi ritten exams, reports	gned to the studer etc	nt such as daily

12. Learning and Teaching Resources				
Required textbooks (curricular books, if any)	Design and analysis of agricultural experiments - written by Dr. Humbled Mahmoud Al-Rawi			
Main references (sources)	Design and analysis of agricultural experiments - written by Dr. Humbled Mahmoud Al-Rawi			
Recommended books and references (scientific journals, reports)	International journals within Scopus containers			
Electronic References, Websites	https://www.mdpi.com/journal/agriculture/special_issues/ 2G5YP36HYR			

Course Description Form

1. Course Name:

Tourism and parks

2. Course Code:

TOUR325

3. Semester / Year:

Second Semester – Third Year

4. Description Preparation Date:

1-4-2024

5. Available Attendance Forms:

Mandatory

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

2

7. Course administrator's name (mention all, if more than one name) Name: d. kota anwer mohammed

Email: kotaanwer@uokirkuk.edu.iq

8. Course Objectives

Course Objectives	•	Make the studend familiar with iraqi tourist attractions
	•	Make him able to guide tourists
	•	Learn about the factors that attract tourists

9. Teaching and Learning Strategies

Strategy Raising the level of the studend and learn about the basics of tourism and h to maintain it

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	knowledge	Introduction and definition of tourism	lecture	Exam and attendance
2	2	knowledge	Outdoor hiking and forests	lecture	Exam and attendance

attendance
attendance
attendance
attendance
attendance
attendance
attendance
attendance
attendance
attendance
attendance

11. Course Evaluation

The semester grade is 40, divided into 10 grades for daily preparation and participation and 30 Grades with 2 monthly exams ,each exam 15 grades , the final exam score is 60 %.

12. Learning and Teaching Resources

Required textbooks (curricular books, if any)	Lectures after teaching based on books and Methodological references
Main references (sources)	
Recommended books and references (scientific journals, reports)	Related scientific and agriculture journals ;including Kirkuk agriculture university journal
Electronic References, Websites	Foreign magazines and sources translated On internet

Course Description Form									
1. Co	1. Course Name:								
			Wood Science)					
2. Co	urse Co	de:							
			WOSC326						
3. Sei	mester /	Year:							
		Seco	und semester/thi	rd year					
4. De	scription	n Preparation Date:							
			31/03/2024						
5. Av	ailable A	Attendance Forms:							
			Mandatory						
6. Nu	mber of	Credit Hours (Total) / 2	Number of Uni	ts (Total)					
		(5) Ho	ours, Number of	units (3)					
7. Co	urse adı	ninistrator's name (mer	ntion all, if mor	e than one i	name)				
Name:	Lecture	r Dr. Osamah Ibrahim Ah	med Email: os	sama_alzaidb	agy@uokirkuk.edu.iq				
8. Co	urse Ob	jectives							
The stu	ident's k	nowledge of wood, which	ch constitutes m	ore than 90°	% of the mass of trees				
and w	hich will	l form the basic materia	al for many us	es and indu	stries. The student is				
introdu	ced to t	he technological charact	eristics of wood	d (chemical,	, physical, anatomical,				
and m	echanica	l), and then cell divisi	on and growth	in trees.	The variations in the				
mentio	ned chai	acteristics within the tro	ee will also be	addressed.	Individual and within				
species	and fact	ors affecting variation.							
9. Te	aching a	nd Learning Strategies							
1. Iden	tify the t	echnological characterist	ics of wood.	_					
2. Dete	ermine th	e optimal type and age for	or each wooden i	ndustry.					
3. Dete	ermine th	e variations in wood and	the influence of	surrounding	g factors on that.				
4. Con	ducting s	tudies and research to im	prove the qualities	ies of wood.					
10. Co	ourse Sti	ructure							
Week	Hours	Required Learning	Unit or	Learning	Evaluation method				
		Outcomes	subject name	method					
		of the science of wood							
1	5	and the vocabulary of the	Knowledge	lecture	Daily reports				
		material							
2	5	Chemical properties of	Knowledge	lecture	Daily exam and reports				
	5	wood	and skills	lecture	Daily exam and reports				
3	5	Plant Cell	Knowledge and skills	lecture	Daily exam and reports				
4	5	Growth in plants	Knowledge and skills	lecture	Daily exam and reports				
5	5	Stages of plant cell formation	Knowledge and skills	lecture	Daily exam and reports				
6	5	Annual growth rings	Knowledge and skills	lecture	Daily exam and reports				

7	5	Physical characteristics	Kno an	owledge d skills	lecture	Daily exam and reports	
8	5	Density and specific gravity	Kno an	owledge d skills	lecture	Daily reports	
9	5	Absorption of vibrations in timber	Kno an	owledge d skills	lecture	Daily reports	
10	5	Acoustic conductivity of wood	Kno	owledge	lecture	Daily reports	
11	5	Electrical conductivity and thermal insulation of wood	Kno	owledge	lecture	Daily reports	
12	5	Mechanical qualities	Kno	owledge	lecture	Daily exam and reports	
13	5	Wood root system	Kno an	owledge nd skill	lecture	Daily exam and reports	
14	5	Bark	Kno an	owledge nd skill	lecture	Daily exam and reports	
15	5 Variation Ki		Kno an	owledge nd skill	lecture	Daily reports	
11.Co	11.Course Evaluation						
Semester endeavor (40 marks): 25 marks The theoretical part: 20 marks Two monthly							
exams, 5 marks Reports							
15 marks Practical part: 10 marks monthly exams, 5 mar						onthly exams, 5 marks	
			stud	dent practical activity			
Final quest (60 marks): 40 marks theoretical questions, 20 marks practical questions							
12.Learning and Teaching Resources							
Required textbooks (curricular books, if any)				(wood as raw material) Book			
Main references (sources)				(Princible of wood technology) Book			
Recom	Recommended books and references				International periodicals and magazines in		
(scienti	(scientific journals, reports)				Clarvit and Scopus containers		
Electro	Electronic References, Websites				International periodicals and magazines in Clarvit and Scopus containers		

Course Description Form					
1. Course Name:					
English language 3/ pre- intermediate level					
2. Course Code:					
ENGL327					
3. Semester / Year:					
second semester/ third year					
4. Description Preparation Date:					
31/03/2024					
5. Available Attendance Forms:					
Mandatory					
6. Number of Credit Hours (Total) / Number of Units (Total)					
1 hour					
7. Course administrator's name (mention all, if more than one name)					
Name: Berevan Qader Omar Email: beree.omer@gmail.com					
8. Course Objectives					

Teaching this curriculum aims to make the student familiar with the English language as it is a global language from which the student will benefit widely in his academic life. This curriculum is an extension of what the student learned in the first and second stages.

9. Teaching and Learning Strategies

It is a semi-integrated curriculum for the pre-intermediate level, which includes the necessary basics for learning the English language for the pre-intermediate level, along with exercises. It includes interrogative articles and four types of verb tenses, with an explanation of each tense in the form of the affirmative, negative, and question. It also includes how to Expressing quantities, articles, and indefinite in the English language, comparative and superlative adjectives, and identifying verb forms in the English language.

10. Course Structure							
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method		
1	1	Question words	Knowledge	lecture	Exercise		
2	1	Present simple for pre- intermediate level	Knowledge	lecture	Exercise		

3 1 Present continuous for pre- intermediate level Knowledge lecture Exercise 4 1 Past simple for pre- intermediate level Knowledge lecture Exercise 5 1 pre- intermediate level Knowledge lecture Exercise 6 1 Expression of quantity Knowledge lecture Quiz 7 1 Articles Knowledge lecture Exercise 8 1 Superlative auxiliary verbs Knowledge lecture Exercise 9 1 Have to Knowledge lecture quiz 11 1 Should Knowledge lecture quiz 12 1 Must Knowledge lecture quiz 13 1 Verb pattern 1 Knowledge lecture Exercise 14 1 Verb pattern 2 Knowledge lecture Quiz 14 1 Verb pattern 1 Knowledge lecture Quiz 15 1 Irregular verbs Knowledge lecture Quiz							
4 1 Past simple for pre- intermediate level Knowledge lecture Exercise 5 1 Past continuous for level Knowledge lecture Exercise 6 1 Expression of quantity Knowledge lecture Quiz 7 1 Articles Knowledge lecture Exercise 8 1 Comparative and superlative Knowledge lecture Exercise 9 1 Have to Knowledge lecture quiz 10 1 Introduction to modal auxiliary verbs Knowledge lecture quiz 11 1 Should Knowledge lecture quiz 12 1 Must Knowledge lecture quiz 13 1 Verb pattern 1 Knowledge lecture Quiz 11. 1 Standard Knowledge lecture Quiz 14 1 Verb pattern 2 Knowledge lecture Quiz 15 1 Irregular verbs Knowledge lecture Quiz	3	1	Present continuous for pre- intermediate level	Knowledge		lecture	Exercise
51Past continuous for pre- intermediate levelKnowledgelectureExercise61Expression of quantityKnowledgelectureQuiz71ArticlesKnowledgelectureExercise81Comparative and superlativeKnowledgelectureExercise91Have toKnowledgelectureExercise91Introduction to modal auxiliary verbsKnowledgelecturequiz111ShouldKnowledgelecturequiz121MustKnowledgelectureExercise131Verb pattern 1KnowledgelectureExercise141Verb pattern 2KnowledgelectureQuiz11.Course EvaluationSemester endeavor (40 marks):15 marks for the first month exam + 5 marks for quiz 15 marks for second month exam + 5 marks for quiz Final exam (60 marks)12.Learning and Teaching ResourcesNew headway plus (elementary student 1 / written by : John and Liz Soars / C university pressMain references (sources)Cambridge press Recommended books and references (sources)My English library website	4	1	Past simple for pre- intermediate level	Knowledge		lecture	Exercise
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Course Description Form									
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2. Course Code:									
SILV411									
3. Semester / Year:									
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7. Co	ourse ad	ministrator's name (r	nention all. if mo	re than one nai	ne)				
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7. 10	Identify t	the location of trees in	side the forest						
2.	Recogniz	the classification of	trees within the fo	prest.					
3.	Identify t	he classification of tre	es for the purpose	of mapping for	est management.				
4.	Classific	ation of trunks for Eur	opean forest resea	rch institutions	e				
5.	Recogniz	the economic feasib	ility of developme	ent forest system	s projects				
10. C	ourse St	ructure							
Week	WeekHoursRequired Learning OutcomesUnit or subject nameLearning methodEvaluation method								
1	5	Developmental Terms for Growth	Developmental Terms for Growth	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports				
2	5	Cleaning Cut	Cleaning Cut	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports				
3	5	Enhancement cut	Enhancement	Lecture,	Verbal, editorial,				
			cutting	presentations	daily and monthly				

				and interactive discussion	tests and scientific reports		
4	5	Rescue cut	Rescue cut	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
5	5	Editorial cut	Editorial cut	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
6	5	Mitigation cut	Mitigation cut	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
7	5	pruning	pruning	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
8	5	Forest Lighting Length of Light	Forest Lighting Length of Light	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
9	5	Development classification of forest trees	Development classification of forest trees	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
10	5	Forest renovation methods	Forest renovation methods	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
11	5	Classification of Shadlyn Ten- Year Forest System	Classification of Shadlyn Ten-Year Forest System	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
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Al Baraki, 2020 Recommended books and references (scientific journals, reports) Electronic References, Websites International journals included in Scopus				Plant Breeding and Improvement, Fouad Razak			
(scientific journals, reports) Electronic References, Websites International journals included in Scopus	Pagemmanded books and references				AI Daraki	, 2020	
Electronic References, Websites International journals included in Scopus	(scient	ific jour	als reports)				
	Electro	nic Refe	erences. Websites		Internati	onal journals ind	cluded in Scopus

Course Description Form									
1. Course Name:									
			Forest Planni	ng					
2. Co	ourse Co	de:							
			F0PL412						
3. Se	mester /	Year:	~ //						
	• •	- H	first Semester/four	rth Year					
4. De	escription	n Preparation Date:	20/02/2024	l					
5		A 44 1 T	29/03/2024	-					
5. Av	allable A	Attendance Forms:	Mandatam						
	mbor O	f Cradit Hours (Tata	Mandatory	Inita (Total)					
0. IN	inder O	$\frac{1 \text{ Credit Hours (10ta)}}{(5)}$	I) / Number Of C	f Unite (2)					
7 6	urse Ad	(J) ministrator's Name (Mention All If N	More Than One	Name)				
	me•Mał	di Hadi F-Mail							
	urse Ob	viectives							
		jeenves							
9. Te	aching A	And Learning Strateg	vies						
Enabl	ing Stude	ents To Prepare Progr	ams And Plans F	For Education A	nd Improvement Of				
Differe	ent Types	s Of Forestry.							
10 C	• • • • • • • • • • • • • • • • • • •								
10. C	ourse St	Degrined							
Wook	Hours	Kequirea Loorning	Unit Or	Learning	Evaluation				
WEEK	110015	Outcomes	Subject Name	Method	Method				
		Main Methods Of	Main Methods	Lecture.	Verbal, Editorial.				
		Forest	Of Forest	Presentations	Daily And				
1	5		Planning:	And	Monthly Tests				
	_		Sustained	Interactive	And Scientific				
			Production	Discussion	Reports				
		Permanent	Permanent	T and an					
		Production Forms	Production	Lecture,	Verbal, Editorial,				
	~		Forms -	Presentations	Daily And				
2	5		Permanent	And	Monthly Tests				
			Production	Interactive	And Scientific				
	Types Discussion Reports								
		Means Of	Means Of	Lecture,	Verbal, Editorial,				
		Regulating	Regulating	Presentations	Daily And				
3	5	Production In	Production In	And	Monthly Tests				
		Forests	Forests	Interactive	And Scientific				
				Discussion	Reports				
1	5	Brawl Sizes: Dawl	Brawl Sizes:	Lecture,	Verbal, Editorial,				
4	5	Sizes - Production	Dawl Sizes -	Presentations	Daily And				

	T	1		1	
		Tables	Production Tables	And Interactive	Monthly Tests And Scientific
				Discussion	Reports
5	5	Types Of User's Production Precautions	Types Of User's Production Precautions - Ideal Production Schedules Sports Function Production Schedules	Lecture, Presentations And Interactive Discussion	Verbal, Editorial, Daily And Monthly Tests And Scientific Reports
6	5	Grade: Methods For Classification And Assessment Of Site Grade	Location Grade: Methods For Classification And Assessment Of Site Grade	Lecture, Presentations And Interactive Discussion	Verbal, Editorial, Daily And Monthly Tests And Scientific Reports
7	5	Sources Of Collection Of Location-Grade Data	Sources Of Collection Of Location- Grade Data	Lecture, Presentations And Interactive Discussion	Verbal, Editorial, Daily And Monthly Tests And Scientific Reports
8	5	Ways To Number Site Guide Curves - Classification Of Site Curves Totals	Ways To Number Site Guide Curves - Classification Of Site Curves Totals	Lecture, Presentations And Interactive Discussion	Verbal, Editorial, Daily And Monthly Tests And Scientific Reports
9	5	Developing Storage And Treadmill Density: Characteristics Of Developing Storage	Developing Storage And Treadmill Density: Characteristics Of Developing Storage	Lecture, Presentations And Interactive Discussion	Verbal, Editorial, Daily And Monthly Tests And Scientific Reports
10	5	Tree Density - Developing Storage	Tree Density - Developing	Lecture, Presentations	Verbal, Editorial, Daily And

		Measurement	Storage	And	Monthly Tests
		Methods	Measurement	Interactive	And Scientific
			Methods	Discussion	Reports
		Growth:	Growth:	Lecture,	Verbal, Editorial,
		Brawl Growth -	Brawl Growth	Presentations	Daily And
11	5	Growth Elements	- Growth	And	Monthly Tests
			Elements	Interactive	And Scientific
				Discussion	Reports
12	5	Factors Influencing Growth - Growth Curves In Brawls	Factors Influencing Growth - Growth Curves In Brawls	Lecture, Presentations And Interactive Discussion	Verbal, Editorial, Daily And Monthly Tests And Scientific Reports
		Express Growth	Ways To	Lecture,	Verbal, Editorial,
			Express	Presentations	Daily And
13	5		Growth	And	Monthly Tests
				Interactive	And Scientific
				Discussion	Reports
		Ways To Estimate	Ways To	Lecture,	Verbal, Editorial,
		Current And Future	Estimate	Presentations	Daily And
		Current And Future	Lotinate	1 resentations	Daily Allu
14	5	Growth	Current And	And	Monthly Tests
14	5	Growth	Current And Future Growth	And Interactive	Monthly Tests And Scientific
14	5	Growth	Current And Future Growth	And Interactive Discussion	Monthly Tests And Scientific Reports
14	5	Growth Actual Forest	Current And Future Growth Actual Forest	And Interactive Discussion Lecture,	Monthly Tests And Scientific Reports Verbal, Editorial,
14	5	GrowthActual ForestGrowth Tables	Current And Future Growth Actual Forest Growth	And Interactive Discussion Lecture, Presentations	Monthly Tests And Scientific Reports Verbal, Editorial, Daily And
14	5	Actual Forest Growth Tables	Current And Future Growth Actual Forest Growth Tables	And Interactive Discussion Lecture, Presentations And	Monthly Tests And Scientific Reports Verbal, Editorial, Daily And Monthly Tests
14	5 5 5	Actual Forest Growth Tables	Current And Future Growth Actual Forest Growth Tables	And Interactive Discussion Lecture, Presentations And Interactive	Monthly Tests And Scientific Reports Verbal, Editorial, Daily And Monthly Tests And Scientific

11.Course Evaluation

The Grade For The Semester Examination Is (40%), Divided Into (10) Grades For Daily Preparation, Participation, And Submitting Reports, (30) Grades For Monthly Exams, With Two Monthly Exams For Each Exam (15) Grades, And The Grade For The Final Exam Is (60%).

12.Learning And Teaching Resources	
Required Textbooks (Curricular Books, If	Lectures Prepared By The Teacher Based On
Any)	Relevant Books And References.
Main References (Sources)	
Recommended Books And References	
(Scientific Journals, Reports)	
Electronic References, Websites	International Journals Included In Scopus

	Course Description Form								
1. Co	1. Course Name:								
	Wooden industries								
2. Co	ourse Co	de:							
			WOIN413						
3. Se	mester /	Year:							
4 D-	• •	Fir	st semester/forth	i year					
4. De	scription	n Preparation Date:	21/02/2024						
5 4 1	ailahla /	ttandanca Forms.	51/05/2024						
J. AV			Mandatory						
6 Nu	mber of	Credit Hours (Total) /]	Number of Uni	ts (Total)					
0. 114		(5) Ho	ours. Number of	units (3)					
7. Co	urse adı	ninistrator's name (mer	ntion all, if mor	e than one i	name)				
Name:	Lecture	r Dr. Osamah Ibrahim Ah	med Email: os	sama_alzaidb	agy@uokirkuk.edu.iq				
8. Co	urse Ob	jectives							
The stu	ident's k	nowledge of wood produ	icts, products th	at use wood	as an essential part of				
their n	nanufacti	ure, industry methods,	international pr	oduct speci	fications, methods of				
measur	ring them	, and then methods for de	eveloping wood	industries an	nd their future.				
9. Te	aching a	nd Learning Strategies							
1. Iden	tifying w	ood industries and their o	development over	er time.					
2. Iden	tify the t	ypes of wood products an	nd their uses.						
3. Lear	n about t	he methods of manufactu	iring these produ	icts.					
4. Rese	earch and	studies to sustain and de	evelop wood indi	ustries					
5. Iden	tily the e	woture	ese projects.						
10. 00	Jui se Sti	Required Learning	Unit or	Learning					
Week	Hours	Outcomes	subject name	method	Evaluation method				
	_	A historical overview		incentou					
	5	of wood industries	Knowledge	lecture	Daily exam and reports				
2	5		Knowledge	lecture	Daily arom and reports				
	5	Wood Adhesive 1	and skills	lecture	Daily exam and reports				
3	5	Wood Adhesive 2	Knowledge	lecture	Daily exam and reports				
		Production of round	Knowledge						
4	4 5 wood and mine wood and skills lecture Daily exam and reports								
5	5	Rail Road Ties	Knowledge	lecture	Daily exam and reports				
		Production	and skills						
6	5	Lumders Manufacture	and skills	lecture	Daily exam and reports				
7	5	Glued Laminated	Knowledge	lecturo	Daily aron and reports				
/	5	Timbers	and skills	lecture	Daily Chain and reports				
8	5	Veneer Manufacture	Knowledge and skills	lecture	Daily exam and reports				

9	5	Particle Board	Knowledge and skills	lecture	Daily exam and reports			
10	5	Wood - cement Board	Knowledge	lecture	Daily exam and reports			
11	5	Gypsum – Wood Board	Knowledge	lecture	Daily exam and reports			
12	5	Wood Fiber Board	Knowledge	lecture	Daily exam and reports			
13	5	Pulp & Paper Manufacture	Knowledge and skill	lecture	Daily exam and reports			
14	5	Destructive carbonization and distillation of wood	Knowledge and skill	lecture	Daily exam and reports			
15	5	Treatments on used wood	Knowledge and skill	lecture	Daily exam and reports			
11.Co	11.Course Evaluation							
Semest	er endea	vor (40 marks): 25 marks	The theoretical	part: 20 ma	rks Two monthly			
			exams, 5 mark	s Reports				
		15 marks	Practical part:	10 marks mo	onthly exams, 5 marks			
			student practic	dent practical activity				
Final q	uest (60	marks): 40 marks theoret	ical questions, 2	0 marks pra	ctical questions			
12.Le	earning a	and Teaching Resources	5					
Requir	ed textbo	ooks (curricular books, if	any) (Wooden	(Wooden Productins) Book				
Main re	eference	s (sources)	(Wooden	(Wooden production) Book				
Recom	mended	books and references	Earact Dr	Forest Product Journal				
(scienti	ific journ	als, reports)	Forest Pro					
Electro	nic Refe	rences, Websites	Internati Clarvit a	International periodicals and magazines in Clarvit and Scopus containers				

Course Description Form									
1. Course Name:									
			Forest Protec	ction					
2. Co	ourse Co	de:							
			FOPT414	4					
3. Se	mester /	Year:							
Fir	st semes	ter/fourth year							
4. De	scriptio	n Preparation Date:							
29/	/03/2024								
5. Av	ailable A	Attendance Forms:							
Ma	andatory								
6. Nu	imber of	Credit Hours (Total)	/ Number of U	Inits (Total)					
(5)	Hours, l	Number of units (3)							
7. Co	ourse ad	ministrator's name (m	ention all, if m	ore than one na	ame)				
Na	me:MO	HAMMED ALBAYA	TI E-mail <u>a</u>	<u>lbayatiiu@uokii</u>	<u>rkuk.edu.iq</u>				
8. Co	ourse Ob	jectives							
The pu	rpose of	the course is to prepare	e forestry mainte	enance specializ	ed forestry cadres.				
Forest	conserva	tion methods of all fac	tors						
9. Te	aching a	and Learning Strategie	es						
Enabli	no studei	nts to maintain and com	bat forests in vi	ital ways					
Liidoin	ing studer	its to maintain and con	ibat iorests in vi	ital ways					
10. Co	ourse St	ructure							
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method				
1	5	Knowledge of forest conservation science	forest conservation science	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports				
2	5	Identification of types of forest fires	forest fires	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports				
3	5	Identifying fire behavior	fire behavior	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports				
4	5	Fire Environment Recognition	Environment Recognition	Lecture, presentations	Verbal, editorial, daily and monthly				

				and interactive	tests and scientific reports
5	5	Identification of factors affecting forest fires	factors affecting forest fires	discussion Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	Identification of firefighting methods	firefighting methods	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	Identification of fire lines and firecrackers	fire lines and firecrackers	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	Adverse Fire Identification	Adverse Fire	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Learn about modern fire studies	modern fire studies	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Identification of gases and fumes affecting forests	gases and fumes affecting forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	Identify the types of smoke- loaded fog	types of smoke- loaded fog	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	Identifying the impact of toxic gases on forests	toxic gases on forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
13	5	Recognize Climate	Climate	Lecture,	Verbal, editorial,

		Factors	Facto	ors	presentations and	daily and monthly tests and scientific
					interactive	reports
					discussion	L
14	5	Identification of freezing factors	freez facto	ring ors	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
15	5	Identification of forest biodiversity factors	forest biodiversity factors		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11.C	ourse Ev	valuation				
The gr	ade for the	he semester examination	n is (4	0%), divi	ded into (10) gra	des for daily
prepar	ation, par	rticipation, and submitti	ing rep	ports, (30)	grades for mon	thly exams, with two
month	ly exams	for each exam (15) gra	ides, a	nd the gra	de for the final e	exam is (60%).
12.L	earning	and Teaching Resourc	ces			
Requir	Required textbooks (curricular books, if any			Lectures prepared by the teacher based on relevant books and references.		
Main references (sources)			Forest Maintenance - Yawz Shafiq Abdullah – 1982			
Recommended books and references						
(scient	(scientific journals, reports)			International forest protection journals 2020		
Electro	onic Refe	erences, Websites		International journals included in Scopus		

Course Description Form

Forest economy 2. Course Code: FOEC415 3. Semester / Year: first Semester - Fourth Year: 4. Description Preparation Date: 1-4-2024 5. Available Attendance Forms: Mandatory	1. Course Name:							
2. Course Code: FOEC415 3. Semester / Year: first Semester - Fourth Year: 4. Description Preparation Date: 1-4-2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) 2 7. Course administrator's name (mention all, if more than one name) Name: d. kota anwer mohammed Email: kotaanwer@uokirkuk.edu.iq 8. Course Objectives Course Objectives Course Objectives 9. Teaching and Learning Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Week Hours Required Unit or subject name Learning Evaluation Outcomes Unit or subject name Learning Evaluation	Forest economy							
FOEC415 3. Semester / Year: first Semester – Fourth Year: 4. Description Preparation Date: 1-4-2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) 2 7. Course administrator's name (mention all, if more than one name) Name: d. kota anwer mohammed Email: kotaanwer@uokirkuk.edu.iq 8. Course Objectives • Make the Student aware of what forests are as global resource • The economy • • How to invest in and improve forests 9. 9. Teaching and Learning Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Week Hours Required Unit or subject name Learning Evaluation method	2. Course Code:							
3. Semester / Year: first Semester - Fourth Year: 4. Description Preparation Date: 1-4-2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) 2 7. Course administrator's name (mention all, if more than one name) Name: d. kota anwer mohammed Email: kotaanwer@uokirkuk.edu.iq 8. Course Objectives Course objectives Course Objectives Make the Student aware of what forests are as global resource • How to use forests for recreation • How to invest in and improve forests 9. Teaching and Learning Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Unit or subject name Learning Evaluation Week Hours Required Unit or subject name Learning Evaluation	FOEC415							
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4. Description Preparation Date: 1-4-2024 5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) 2 7. Course administrator's name (mention all, if more than one name) Name: d. kota anwer mohammed Email: kotaanwer@uokirkuk.edu.iq 8. Course Objectives Strategies Strategies 9. Teaching and Learning Strategies Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Unit or subject name Learning Evaluation Week Required Unit or subject name Learning Evaluation	first Semester – Fourth Year:							
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5. Available Attendance Forms: Mandatory 6. Number of Credit Hours (Total) / Number of Units (Total) 2 7. Course administrator's name (mention all, if more than one name) Name: d. kota anwer mohammed Email: kotaanwer@uokirkuk.edu.iq 8. Course Objectives Course Objectives Course Objectives 9. Teaching and Learning Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Week Hours Required Learning Outcomes Unit or subject name Learning method Evaluation method	1-4-2024							
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7. Course administrator's name (mention all, if more than one name) Name: d. kota anwer mohammed Email: kotaanwer@uokirkuk.edu.iq 8. Course Objectives 6 Make the Student aware of what forests are as global resource • The economy • How to use forests for recreation • How to invest in and improve forests 9. Teaching and Learning Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Week Hours Required Learning Outcomes Unit or subject name Learning Learning method Evaluation method								
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8. Course Objectives • Make the Student aware of what forests are as global resource • The economy • • How to use forests for recreation • How to invest in and improve forests 9. Teaching and Learning Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Week Hours Required Unit or subject name Learning Evaluation Method Interning Outcomes Interning Interning Interning	Email: kotaanwer@uokirkuk.edu.iq							
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How to invest in and improve forests 9. Teaching and Learning Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Week Hours Required Unit or subject name Learning Evaluation 0utcomes Outcomes Image: Course of the subject name	How to use forests for recreation							
9. Teaching and Learning Strategies Strategy Raising the level of the Student and learn about the basics of tourism a how to maintain it 10. Course Structure Week Hours Required Unit or subject name Learning Evaluation Unit or subject name Learning Method method method	How to invest in and improve forests							
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10. Course Structure Week Hours Required Unit or subject name Learning Evaluation Learning Outcomes Outcomes Hours Hours Hours								
10. Course Structure Week Hours Required Unit or subject name Learning Evaluation Learning Outcomes Outcomes Hours Hours Hours								
Week Hours Required Unit or subject name Learning Evaluation Learning Outcomes Outcomes Hours Hours Hours Hours	10. Course Structure							
Learning method method	Week Hours Required Unit or subject name Learning Evaluation							
Outcomes	Learning method method							
	Outcomes							
1	1							

1	2	knowledge	The emergence Of forest econ	e of the science omics	Iecture	Exam and attendance
2	2	knowledge	Scarcity of wo treatments	od, causes and	Iecture	Exam and attendance
3	2	knowledge	Types of fores costs	t projects and th	Iecture	Exam and attendance
4	2	knowledge	Objectives of p Forests	projects in	Iecture	Exam and attendance
5	2	knowledge	Determine the Cutting cycle of	e economics of the forest	lecture	Exam and attendance
6	2	knowledge	Income genera Forestry proje	ated in ects	Iecture	Exam and attendance
7	2	knowledge	Calculating su In small project Mathematical	ccess and failure cts using equation	Iecture	Exam and attendance
8	2	knowledge	Investing in th	e forest	Iecture	Exam and attendance
9	2	knowledge	Selling forest	products	Iecture	Exam and attendance
10	2	knowledge	Markets in wh Economy is re	ich the forest presented	lecture	Exam and attendance
11	2	knowledge	Diseases that a Forests	affect trees in	Iecture	Exam and attendance
12	2	knowledge	Causes of fires Damage to tre To type and ag	and extent of es according ge	Iecture	Exam and attendance
13	2	knowledge	How to treat d Affect trees	liseases that	Iecture	Exam and attendance
14	2	knowledge	Causes of fore How to avoid	st fires and them	lecture	Exam and attendance
15	2	knowledge	An overview o In Iraq and the In them	of the forests e types of trees	lecture	Exam and attendance
11.	Course I	Evaluation				
The ser 30 Grades	nester gr with 2 m	ade is 40, divid onthly exams ,e	ed into 10 gra each exam 15 g	des for daily pr grades , the fina	eparation a	nd participation and re is 60 %.
12.	Learning	and Teachin	g Resources			
Required textbooks (curricular books, if any)				Lectures aft Methodolog	er teachin gical refere	g based on books a ences
Main references (sources)						
Recommended books and references (scientific journals, reports)				Related scie ;including K journal	entific and Iirkuk agri	agriculture journa culture university
Electror	nic Refere	nces, Websites		Foreign mag On internet	gazines an	d sources translate

Course Description Form							
1. Co	ourse Na	me:					
Research Project							
2. Co	ourse Co	de:					
			REPR426				
3. Se	mester /	Year:					
Se	cond sen	nester/fourth year					
4. De	escription	n Preparation Date:					
29	/03/2024						
5. Av	vailable A	Attendance Forms:					
	andatory	Cardit House (Total)	/ Number of Th				
$\begin{array}{c} 0. \mathbf{N} \mathbf{I} \\ (1) \end{array}$	Hours	Number of units (3)) / Number of U	ints (10tal)			
(1)) Hours, I	ministrator's name (n	pontion all if m	oro than one no	ma)		
			TI E mail al	bayatiju@uokir	kuk edu ja		
	une.MO	iactivas			Kuk.cuu.ly		
The co	urse aim	s to identify methods o	f conducting sen	ninars and collec	rting research		
source	s. and the	eir scientific summaries	s and narrative m	ethods.	ting research		
9. Te	aching a	and Learning Strategi	es				
Enabl	ing stude	ents to prepare Gabones	se projects that ke	eep pace with m	odern scientific		
progre	ss						
10. C	ourse St	ructure					
		Required Learning	Unit or	Learning	Evaluation		
Week	Hours	Outcomes	subject name	method	method		
1	3	Knowledge of scientific research	scientific research	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports		
2 3 Identifying the reasons for prese reasons for scientific scientific and research intera					Verbal, editorial, daily and monthly tests and scientific reports		
3	3	Knowledge of the conditions for conducting	conducting scientific research	Lecture, presentations and	Verbal, editorial, daily and monthly tests and scientific		

		scientific research		interactive discussion	reports
4	3	Identification of certified classifications for scientific research	certified classifications for scientific research	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
5	3	Knowledge of scientific research curricula	scientific research curricula	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	3	Knowledge of scientific research tools	scientific research tools	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	3	Learn about the steps of scientific research	steps of scientific research	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	3	Recognize data collection methods in practice	collection methods in practice	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	3	Identification and correction of data analysis	correction of data analysis	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	3	Knowledge of scientific research departments	research departments	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	3			Lecture,	Verbal, editorial,

		1	1		I	1
		Learn how to	wri	te	presentations	daily and monthly
		write scientific	scien	tific	and	tests and scientific
		research	resea	urch	interactive	reports
					discussion	
12	3	Identification of import of research sources	research sources		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
13	3	Identification of import of research sources	import of research sources		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
14	3	To learn how to write research and use scientific applications	scientific applications		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
15	3	final examination.	final exan	nination.	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11.C	ourse Ev	valuation			•	
The gr prepar month	rade for t ation, pa ly exams	he semester examination rticipation, and submitted for each exam (15) grad	on is (4 ting re ades, a	0%), divic ports, (30) and the gra	ded into (10) gra grades for mont de for the final e	des for daily thly exams, with two exam is (60%).
12.L	earning	and Teaching Resour	ces	-		
Requi	red textb	ooks (curricular books,	if any	Lectures relevant b	prepared by the books and refere	teacher based on nces.
Main references (sources)				Scientifi 2016. Ste Bayan Ce	ic Research Dire ps to Write Scie enter for Studies	ectory, Riad Aziz Hadi ntific Research, Al
Recon	nmended	books and references				
(scient	tific jour	nals, reports)				
Electro	onic Refe	erences, Websites		Internat	ional journals in	cluded in Scopus



Course Description Form
1. Course Name:
Forest ecology
2. Course Code:
FOEC417
3. Semester / Year:
First semester/ forth year
4. Description Preparation Date:
31/03/2024
5. Available Attendance Forms:
Mandatory
6. Number of Credit Hours (Total) / Number of Units (Total)
(5) Hours, Number of units (3)
7. Course administrator's name (mention all, if more than one name)
Name: dr. Shahin Abbas MustafaName: Berevan Qader Omaremail: beree.omer@gmail.com
8. Course Objectives
This curriculum aims to introduce the student to the most important pillars necessary for
the forest environment and how to deal with the problems surrounding them in a
scientifically studied manner, and to prepare an agroforestry engineer who is aware of the
importance of forests on the environment and is aware of the importance of maintaining the
environmental balance in forests because of its importance in various fields, especially
Maintaining food security.
9. Teaching and Learning Strategies
The strategy includes an integrated definition of the forest environment and its most
important characteristics, and identification of the ecosystem, the environmental

environment, and the food chain, as well as the most important environmental problems facing forests, their causes, and ways to avoid them and protect forests from the resulting damages.

10. Course Structure

Week	Hours	Required Learning	Unit or	Learning	Evaluation method
week	nouis	Outcomes	subject name	method	Evaluation include
1	5	Introduction to ecology and the problems that faces forest environment	Knowledge	lecture	Daily exam and reports
2	5	Eco system and desertification	Knowledge and skills	lecture	Daily exam and reports
3	5	Food chain and desertification factors	Knowledge and skills	lecture	Daily exam and reports
4	5	The relationship between components of the natural environment and the human	Knowledge and skills	lecture	Daily exam and reports
5	5	Eco balance and deterioration of eco system	Knowledge and skills	lecture	Daily exam and reports
6	5	Unbalanced eco system and deterioration the natural forest	Knowledge and skills	lecture	Daily exam and reports
7	5	Carbon and nitrogen cycle and deterioration of artificial forest	Knowledge and skills	lecture	Daily exam and reports
8	5	Natural pastures and forest conservation	Knowledge and skills	lecture	Daily reports
9	5	Agricultural land and food production and the effect of light on forest	Knowledge and skills	lecture	Daily exam and reports
10	5	Forest pollution and the effect of temperature on forest	Knowledge	lecture	Daily exam and reports
11	5	Components of a polluted environment and the dangers of pollution	Knowledge	lecture	Daily exam and reports
12	5	Forest climate pollution	Knowledge	lecture	Daily exam and reports
13	5	Water pollution	Knowledge and skill	lecture	Daily exam and reports
14	5	Air pollution	Knowledge and skill	lecture	Daily exam and reports
15	5	Soil pollution	Knowledge and skill	lecture	Daily exam and reports

11.Course Evaluation	11.Course Evaluation				
Semester endeavor (40 marks): 25 marks The theoretical part: 20 marks Two monthly					
exa	ms, 5 marks Reports				
15 marks Prac	tical part: 10 marks monthly exams, 5 marks				
stuc	lent practical activity				
Final quest (60 marks): 40 marks theoretical q	uestions, 20 marks practical questions				
12.Learning and Teaching Resources					
Dequired textheolie (ourricular books, if any)	(ecology) Book by				
Required textbooks (curricular books, if any)	Dr. muhemmed sulaiman abido				
	(ecology for agricultural college) Book				
Main references (sources)	By dr . hikmat abbas al aany and dr. raad				
	hashim bakir				
Recommended books and references	International periodicals and magazines in				
(scientific journals, reports)	Clarvit and Scopus containers				
Electronic Deferences Websites	International periodicals and magazines in				
Electronic Kelerences, wedshes	Clarvit and Scopus containers				

Course Description Form				
1. Course Name:				
English language 4/ intermediate level				
2. Course Code:				
ENGL418				
3. Semester / Year:				
First semester/ fourth year				
4. Description Preparation Date:				
31/03/2024				
5. Available Attendance Forms:				
Mandatory				
6. Number of Credit Hours (Total) / Number of Units (Total)				
1 hour				
7. Course administrator's name (mention all, if more than one name)				
Name: Berevan Qader Omar Email: beree.omer@gmail.com				
8. Course Objectives				

Teaching this curriculum aims to make the student familiar with the English language as it is a global language from which the students will benefit widely in their academic life. This curriculum is an extension of what the students learned in the previous three stages.

9. Teaching and Learning Strategies

It is a semi-integrated curriculum for the intermediate level, which includes the necessary basics for learning the English language for the intermediate level, along with exercises. It includes auxiliary verbs and four types of verb tenses, with an explanation of each tense in the form of the affirmative, negative, and question. It also includes an introduction to the modal verbs regarding permission, Obligation and how to make offer and request, as well as an introduction to the future tense.

10. Course Structure								
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method			
1	1	Introduction to modal auxiliary verbs	Knowledge	lecture	Exercise			
2	1	Tenses and auxiliary verbs	Knowledge	lecture	Exercise			

3	1	Negative and auxiliary verbs	Kn	owledge	lecture	Exercise
4	1	Question and auxiliary verbs	Kn	owledge	lecture	Exercise
5	1	Present simple for intermediate level	Kn	owledge	lecture	Exercise
6	1	Present continuous for intermediate level	Kn	owledge	lecture	Quiz
7	1	Past simple for intermediate level	Kn	owledge	lecture	Exercise
8	1	Past continuous for intermediate level	Kn	owledge	lecture	Exercise
9	1	Modal verbs	Kn	owledge	lecture	Exercise
10	1	Modal verbs of obligation and permission	Knowledge		lecture	quiz
11	1	Should, ought to , must	Knowledge		lecture	quiz
12	1	Making request	Kn	owledge	lecture	Exercise
13	1	Making offers	Kn	owledge	lecture	Exercise
14	1	Introduction to future	Kn	owledge	lecture	Exercise
15	1	Future with facts and predictions	Kn	owledge	lecture	Quiz
11.Co	ourse Ev	aluation				
Semest	er endea	vor (40 marks): 15 mark	s for	the first mo	onth exam +	5 marks for quiz
		15 mark	ts for	second mo	onth exam +	5 marks for quiz
			Fina	l exam (60	marks)	
12.Le	earning a	and Teaching Resources	5	Γ		
				New headway plus (elementary student bo		
Required textbooks (curricular books, if any)			/ written by : Liz and John Soars / Oxfo			
			university press			
Main r	eferences	s (sources)		Cambridg	ge press	
Recom	mended	books and references		My Engli	sh library w	ebsite
(scienti	tic journ	als, reports)				
Electro	nic Refe	erences, Websites		You tube and some useful websites		

Course Description Form								
1. Co	1. Course Name:							
Forest Project								
2. Co	ourse Co	de:	EODD 421					
3 Se	mester /	Vear	FOPR421					
5. 50	mester /	Se	cond semester/fou	rth vear				
4. De	scriptio	n Preparation Date:						
		•	29/03/2024					
5. Av	ailable A	Attendance Forms:						
			Mandatory					
0. NU	imber of	Credit Hours (Total) / Number of Uni Hours Number of	units (3)				
7. Co	urse adı	(J) ministrator's name (n	nention all, if mor	e than one nan	ne)			
Na	me:MO	HAMMED ALBAYA	TI E-mail alb	ayatiiu@uokirku	uk.edu.iq			
8. Co	ourse Ob	jectives		- ý	*			
The co	ourse ain	is to prepare Gabones	e cadres specializi	ng in studying	Gabonese projects.			
And br	ring out s	pecialized cadres in						
0 T.	b f							
9. Ie Enabli	acning a	and Learning Strateg	ies aluate Gabonese pi	rojects that keep	nace with modern			
scienti	fic progr	ess	indate Gabonese pi	lojeets that keep	pace with modern			
10 0	F8-							
10. C	ourse St	Required Learning	Unit or subject	Loorning	Evaluation			
Week	Hours	Outcomes	name	method	method			
		Recognize the		Lecture				
		public foundations.	THE	presentations	Verbal, editorial,			
1	5	FOR THE	ASSESSMENT	and	daily and			
	-	ASSESSMENT OF	OF GABON's	interactive	monthly tests and			
		GABON S PROJECTS	PROJECTS	discussion	scientific reports			
		Recognize the		Lecture.				
		reasons for the	(*	presentations	Verbal, editorial,			
2	5	scarcity of timber in	timber in the	and	daily and			
		the world	wond	interactive	scientific reports			
				discussion	scientific reports			
		Identification of		Lecture,	Verbal, editorial,			
3	5	estimating project	costs and	and	daily and			
5	5	costs and revenues	revenues	interactive	monthly tests and			
				discussion	scientific reports			
4	5	Learn how to invest	invest for	Lecture,	Verbal, editorial,			

		for projects	projects	presentations and interactive discussion	daily and monthly tests and scientific reports
5	5	Identification of the use of financial standards in project evaluation	project evaluation	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	Learn about supply and demand methods	supply and demand	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	Find out how to market a project or products and choose ways to distribute them	project or products and choose ways to distribute them	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	Recognize a range of considerations for Gabonese product distribution routes	Gabonese product distribution routes	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Identification of the economic development of Gabon's enterprises	development of Gabon's enterprises	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Identification of the evaluation stages of Gabon's projects	stages of Gabon's projects	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	Learn how to apply treasure theories in determining income, consumption and investment	points in projects	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	Learn how to analyze tie points in projects		Lecture, presentations and	Verbal, editorial, daily and monthly tests and

					interactive	scientific reports
					discussion	
13	5	Project Input & output Identification	Input	& output	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
14	5	Public and private standards for project evaluation	project evaluation		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
15	5	Recognize the fundamentals of the discount and methods of sensitivity analysis for Gabon's economic projects	Gabon's economic projects		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11.C	ourse Ev	aluation	1			
The g	rade for	the semester examin	ation i	ls (40%), d	livided into (10) grades for daily
prepara	ation, par	rticipation, and submit	ting rep	ports, (30) g	grades for month	ly exams, with two
month	y exams	for each exam (15) gr	ades, a	nd the grade	e for the final ex	am is (60%).
12.Le Requir	12.Learning and Teaching Resources Required textbooks (curricular books, if any)			Lectures prepared by the teacher based on relevant books and references.		
		Agen Burgham, Mohammed Abdul Karim -				
Main references (sources)			Foundations of Project Evaluation and Financi			
				Manageme	ent 2010	
Recom	mended	books and references				
Flectro	nic Journ	iais, reports)		Internatio	nal journals inc	luded in Sconus
Lieuu				International journals included in Scopus		

	Course Description Form								
1. Co	1. Course Name:								
	Forest Management								
2. Co	ourse Co	de:							
2 0 -		V 7	FOMA422	2					
3. Se	mester /	Year:	and competer/fe	with yoor					
4 De	scrintio	n Pronaration Date:	cond semester/n	Juitii yeai					
4. Dt	scription		29/03/2024	4					
5. Av	ailable A	Attendance Forms:							
			Mandatory	ý					
6. Nu	umber of	Credit Hours (Total)	/ Number of U	nits (Total)					
		(5)]	Hours, Number of	of units (3)					
7. Co	ourse ad	ministrator's name (m	ention all, if m	ore than one na	me)				
Na	me:Mal	ndi Hadi E-mail							
8. Co	ourse Ob	ojectives	C 1	. 1	··· ·· ·· · · · · · · · · · · · · · ·				
I ne p	urpose o	of the course is to prep	pare Gabonese c	cadres specializi	ng in the science of				
	aching a	nd Learning Strategi	06						
9. IC Verba	l commi	inication with students	s and urging the	m to work tog	ether in the learning				
proces	s and us	se written communica	tion skills to it	ncrease assimila	tion as well as the				
method	d of brain	nstorming to attract stu	idents' attention	and activate the	strategy of thinking				
accord	ing to the	e student's ability, and o	conduct scientifi	c visits to agricu	ltural projects.				
10. C	ourse St	ructure		U	1 5				
Wook	Hours	Required Learning	Unit or	Learning	Evaluation				
WEEK	110015	Outcomes	subject name	method	method				
		forest managemen	Introduction	Lecture,	Verbal, editorial.				
	_		to forest	presentations	daily and monthly				
1	5		managemen	and	tests and scientific				
				interactive	reports				
		Degulation	Dogulation	discussion	-				
		Regulation	Cadastral	Locturo					
			Organization	presentations	Verbal, editorial,				
2	5		- Volume	and	daily and monthly				
2	5		Organization	interactive	tests and scientific				
			- Means of	discussion	reports				
			Regulation						
		Main Regional Units	Main	Lecture,	Varbal aditorial				
			Regional	presentations	verbal, editorial, daily and monthly				
3	5		Units -	and	tests and scientific				
			Educational	interactive	reports				
			Organization	discussion	1000105				

			Units		
4	5	Production	Production: Classification of production equations - Current production estimate	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
5	5	Direct method	Direct method - Indirect method of estimating production	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	Method of estimating	Method of estimating future production	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	Method of distribution	Method of distribution of diameters in the tree	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	life cycles	life cycles	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Types of Life Cycles	Types of Life Cycles - Financial Life Cycle	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Lifecycle	Lifecycle for the largest volume production - economic lifecycle	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	forest land	Projected forest land value	Lecture, presentations and interactive	Verbal, editorial, daily and monthly tests and scientific reports

					discussion	
12	5	Forest Assessment	Idea I Ass (PN	l Forest - Forest sessment W, IRR)	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
13	5	Multiple Uses of the Forest Sports Methods Used in Forest Management	Multiple Uses of the Forest Sports Methods Used in Forest Management		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
14	5	linear programming	linear programming		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
15	5	Coded programming	(prog	Coded ramming	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11.C	ourse Ev	aluation	I		•	
The graph preparation month	rade for ation, par y exams	the semester examination the semester examination the semester examination of the semi-term of term of	ation ing re ides, a	is (40%), eports, (30) and the gra	divided into (1) grades for mon de for the final e	10) grades for daily thly exams, with two exam is (60%).
12.1.0	arming	and reaching Kesour	ces	Looturos	nonarad by the	taashar bagad an
Required textbooks (curricular books, if any		relevant b	prepared by the pooks and reference	nces.		
Main r	eference	s (sources)		Forest M	anagement	
Recom	mended	books and references				
(scient	ific journ	als, reports)				
Electro	onic Refe	erences, Websites		International journals included in Scopus		

	Course Description Form								
1. Co	1. Course Name:								
	Forest Engineering								
2. Co	urse Co	de:							
			FOEN423						
3. Se	mester /	Year:							
See	cond sem	nester/forth year							
4. De	scription	n Preparation Date:	21/02/2024						
-			31/03/2024						
5. Av	ailable A	Attendance Forms:							
		· · · · · · · · · · · · · · · · · · ·	Mandatory	4 (T - 4 - 1)					
6. INU	mber of	Credit Hours (10tal) / 1	Number of Unit	$\frac{1010}{1000}$					
7 00	una odr	(3) HO	ours, Number of	$\frac{\text{units}(5)}{\text{o then one }}$	nomo)				
7. Cu Nomo:	L octuro	r Dr. Osomoh Ibrohim Ah	mod Email :	e than one i	name)				
Name:	Lectures urso Ob	i DI. Osalilali Ibrallilli All	inieu Eman: Os		agy@uokiikuk.euu.iq				
The stu	ident's k	jecuves nowledge of forest engine	eering which de	ale with all	engineering works and				
constru	ictions th	nowieuge of forest engine aat take place inside or a	cound the fores	t land and y	which aim to serve the				
forest	and faci	litate benefiting from f	orest activities	including t	forest roads and their				
annexe	s and the	en service and investmen	t buildings and f	orest protec	tion systems				
9. Te	aching a	nd Learning Strategies	t buildings und I		tion systems.				
1. Lear	n about t	the science of forest engine	neering and its re	elationship t	o various forestry				
activiti	es.	ine serence of forest engin		enationship t	o various forestry				
2. Iden	tify fores	st roads, their types, and t	he facilities atta	ched to them	n.				
3. Iden	tifv meth	ods for draining rainwate	er and melting sr	now.					
4. Serv	ice facili	ties within forests	6						
5. Iden	tify the e	conomic feasibility of the	ese projects.						
10. Co	ourse Sti	ructure							
Wool	Uoung	Required Learning	Unit or	Learning	Evaluation mathed				
WEEK	nours	Outcomes	subject name	method	Evaluation method				
1	5	An introduction to forest engineering	Knowledge	lecture	Daily exam and reports				
2	5	Standards for the construction of forest	Knowledge and skills	lecture	Daily exam and reports				
3	Toads Toads Degradation of forest roads, maintenance and treatments Knowledge and skills								
4	5	Retaining walls in forests	Knowledge and skills	lecture	Daily exam and reports				
5	5	Roads and bridges on forest roads	Knowledge and skills	lecture	Daily exam and reports				
6	5	Drainage of rainwater and streams	Knowledge and skills	lecture	Daily exam and reports				

7	5	Forest protection	Kn ar	owledge nd skills	lecture	Daily exam and reports
8	5	Field visits	Kn ar	owledge nd skills	lecture	Daily reports
9	5	Tourist facilities in forests	Kn ar	owledge nd skills	lecture	Daily exam and reports
10	5	Educational and cultural facilities within forests	Kn	owledge	lecture	Daily exam and reports
11	5	Forest water harvesting	Kn	owledge	lecture	Daily exam and reports
12	5	Forest investment facilities	Kn	owledge	lecture	Daily exam and reports
13	5	Forest design	Kn a	owledge nd skill	lecture	Daily exam and reports
14	5	Natural reserves within forests	Kn ai	lowledge nd skill	lecture	Daily exam and reports
15	5	International standards for establishing forest facilities	Kn ai	owledge nd skill	lecture	Daily exam and reports
11.Co	ourse Ev	aluation				
Semest	er endea	vor (40 marks): 25 marks	The	theoretical	part: 20 ma	rks Two monthly
			exa	ums, 5 marks Reports		
		15 marks	s Prac	ctical part: 10 marks monthly exams, 5 marks		
			stuc	dent practical activity		
Final q	uest (60	marks): 40 marks theoret	<u>1cai q</u>	uestions, 2	0 marks pra	ctical questions
I2.Le	arning a	and leaching Resources	(any)	(Eorost E	nginopring) Pool
Moin r	Required textbooks (curricular books, if any)			(Forest &	Forestry F) DUUK
Recom	monded	books and references		(Polest a	Croiesuy E	ngmeening) Dook
(scienti	(scientific journals, reports,)			Forest En	gineering Jo	ournal
Electronic References, Websites				International periodicals and magazines in Clarvit and Scopus containers		

	Course Description Form								
1. Co	1. Course Name:								
	Forest Breeding								
2. Co	ourse Co	de:							
2 0		X 7	TRBR424	-					
3. Se	mester /	Year:	and compatents	with woon					
1 Do	scription	n Proparation Data:	cond semester/10	burth year					
4. De	scriptio		29/03/2024	1					
5. Av	vailable A	Attendance Forms:	271031202	•					
			Mandatory	/					
6. Nu	imber of	f Credit Hours (Total)	/ Number of U	nits (Total)					
		(5) I	Hours, Number of	of units (3)					
7. Co	ourse ad	ministrator's name (m	ention all, if m	ore than one na	me)				
Na	me:MO	HAMMED ALBAYA	TI E-mail <u>al</u>	bayatiiu@uokir	kuk.edu.iq				
8. Co	ourse Ob	ojectives	1 . 1.	• • • •	T				
The co	ourse aim	is to prepare Gabonese	cadres specializ	zing in educatio	n. Improving forests				
throug	n the use	of programmers	20						
9. Ie	ing stud	ants to propage progra	es	for adjugation of	and improvement of				
differe	nt types	of forestry	and plans		and improvement of				
		or rorestry.							
10. C	ourse St	ructure	T T •4	. .					
Week	Hours	Required Learning	Unit or	Learning	Evaluation				
		Knowledge of Public	subject name	Lecture	methou				
		Foundations		presentations	Verbal, editorial,				
1	5		Public	and	daily and monthly				
			Foundations	interactive	tests and scientific				
				discussion	reports				
		Identify the location		Lecture,	Verhal editorial				
		of trees in the	Botanic	presentations	daily and monthly				
2	5	Botanic Kingdom	Kingdom	and	tests and scientific				
			8	interactive	reports				
		Decession weather to		discussion	1				
Recognize methods Lecture, Verbal, editor									
3	5	and	daily and monthly						
5	5	interactive	tests and scientific						
			variation	discussion	reports				
		Recognize the	Recognize	Lecture.	Verbal. editorial.				
4	5	differences of	the	presentations	daily and monthly				
		quarrels	differences	and	tests and scientific				
L	l	7							

				interactive discussion	reports
5	5	Learn how to perpetuate brawls	quarrels	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	Identification of the genetic origins of Iraq's forestry tree	Identification of the genetic	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	Identification of the genetic origins of Iraq's forestry tree	origins of Iraq's forestry tree	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	Identification of variations between trees and their families	trees and their families	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Identification of other organisms living in forests	organisms living in forests	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Identify the location of evolution of breeds	evolution of breeds	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	Identification of Tree Ground Breeds	Ground Breeds	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	Learn about tree breeding methods	tree breeding methods	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
13	5	Learn About Election Methods	Election Methods	Lecture, presentations	Verbal, editorial, daily and monthly

					and	tests and scientific
					interactive	reports
					discussion	
14	5	Identification of election systems	el sy	ection /stems	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
15	5	Get to know the basics of election	ba el	sics of ection	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11.C	ourse Ev	aluation				
The g	rade for	the semester examination	ation	is (40%),	divided into (1	10) grades for daily
prepara	ation, pai	ticipation, and submitted for each even (15) groups	ing re	ports, (30)	grades for mon	thly exams, with two (60%)
	ly exams	and Topohing Posouro	ues, a	ind the grad		xam is (00%).
Requir	ed textbo	ooks (curricular books,	if any	Lectures j relevant b	prepared by the books and refere	teacher based on nces.
Main references (sources)		Forest Development, Yawz Shafiq Abdullah, 1988.				
		Plant Bree Al Baraki	eding and Impro	vement, Fouad Razak		
Recom	mended	books and references				
(scient	ific journ	als, reports)				
Electro	onic Refe	erences, Websites		Internati	ional journals in	cluded in Scopus

	Cours	e Description Form					
1. Co	ourse Na	me:					
			Wood Preserva	tion			
2. Co	ourse Co	de:					
			WOPR425				
3. Se	mester /	Year:					
		Se	cond semester/Fo	urth year			
4. De	escription	n Preparation Date:	20/02/2024				
- •	•1 1 1		29/03/2024				
5. Av	allable A	Attendance Forms:	Mandatany				
		Cuadit Harra (Tatal	Mandatory				
0. INI	mber ol		Hours Number of Un	f units (3)			
7 6	urso od	(J) ministrator's name (r	nention all if mo	re then one nor	ne)		
	me·Sha	heen Abbas F-mail	il · shahinkifre@	uokirkuk edu ja			
	urse Ob	viectives	n . <u>shannkintee</u>	uokiikuk.euu.iq			
The s	tudent's	knowledge of the sc	ience of wood co	onservation wh	ich touches on the		
proces	s of treat	ting wood with approx	priate chemicals a	and permeating	it into wood for the		
purpos	e of incr	easing its resistance t	o insects and fung	gi and increasin	g its use and use in		
furnitu	re and m	obilization wood indu	stry.		0		
9. Te	aching a	and Learning Strateg	ies				
1.	Recogniz	e wood conservation s	science and its rela	ationship to woo	d biodegradation		
and pr	ocessing.						
2.	Recogniz	e preservatives, types,	, methods of use a	nd fit them with	wood.		
3.	Materials	s and methods used to	preserve wood aga	ainst fire (fire)			
4.	Method u	ised in wood conserva	tion operations ag	ainst fungi and i	insects		
10. C	ourse St	ructure					
XX 7 I -	TT	Required	Unit or	Learning	Evaluation		
week	Hours	Learning	subject name	method	method		
		Profile on Wood	Profile on	Lecture			
		Conservation	Wood	presentations	Verbal, editorial,		
1	5	Conservation	Conservation	and	daily and monthly		
1	5		Comber valion	interactive	tests and scientific		
discussion reports							
		Degradation of	Degradation of	Lecture,	Varbal adda di		
		wood with fungi in	wood with	presentations	verbal, editorial,		
2	5	general	fungi in	and	tests and scientific		
			general	interactive	reports		
				discussion	reports		
_	_	Wood degradation	Wood	Lecture,	Verbal, editorial,		
3	5	with wood	degradation	presentations	daily and monthly		
		excavators	with wood	and	tests and scientific		

			excavators	interactive discussion	reports
4	5	Degradation of wood with bacteria in general	Degradation of wood with bacteria in general	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
5	5	Degradation of timber by marine neighborhoods	Degradation of timber by marine neighborhoods	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
6	5	Needs of rotting fungi	Needs of rotting fungi	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
7	5	The Hycroscopic Property of Dirty Timber	The Hycroscopic Property of Dirty Timber	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
8	5	Timber protection from decomposition	Timber protection from decomposition	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
9	5	Wood is divided by comparison to fungi	Wood is divided by comparison to fungi	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
10	5	Factors affecting the speed of degradation of wood	Factors affecting the speed of degradation of wood	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11	5	Materials used in wood preservation	Materials used in wood preservation	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
12	5	Field visits to the timber plant	Field visits to the timber	Lecture, presentations	Verbal, editorial, daily and monthly

			1	olant	and	tests and scientific
					interactive	reports
					discussion	
13	5	Wood preservation methods in general	Wood preservation methods in general		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
14	5	Characteristic manifestations of brown mold fungi	Characteristic manifestations of brown mold fungi		Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
15	5	distinctive manifestations. To infect white mold fungi	dist manif To whi	tinctive estations. infect te mold ungi	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports
11.Co	ourse Ev	aluation		0		
The g	rade for	the semester examination	ation i	is (40%),	divided into (1	0) grades for daily
prepara	ation, par	rticipation, and submitti	ing rep	ports, (30)	grades for mont	hly exams, with two
monthl	y exams	for each exam (15) gra	ides, a	nd the grad	le for the final ex	kam is (60%).
12.Le	earning a	and Teaching Resourc	ces			
Requir	ed textbo	ooks (curricular books,	if any	Lectures prelevant b	orepared by the to orepared by the tooks and reference the took of too	eacher based on nces.
Main references (sources)		Forest Dev 1988. Plant Bree Al Baraki	velopment, Yaw eding and Impro- 2020	z Shafiq Abdullah, vement, Fouad Razak		
Recom	mended	books and references		Durunn	,	
(scient	ific journ	nals, reports)				
Electro	nic Refe	erences, Websites		Internation	onal journals inc	cluded in Scopus

Course Description Form								
1. Course Name:								
Seminar								
2. Co	ourse Co	de:		7				
2 5		Varia	SEMI42	/				
3. Sel	mester /	Year:	ond competer/f	ourth your				
4 De	scription	n Prenaration Date:	cond semester/1	outur year				
4. Dt	scription		29/03/202	24				
5. Av	ailable A	Attendance Forms:	237 037 202					
			Mandator	y				
6. Nu	mber of	Credit Hours (Total)	/ Number of U	Inits (Total)				
		(1) H	Hours, Number	of units (3)				
7. Co	urse adı	ninistrator's name (m	ention all, if m	ore than one na	ame)			
Na	me:MO	HAMMED ALBAYA	TI E-mail <u>a</u>	<u>llbayatiiu@uoki</u>	rkuk.edu.iq			
8. Co	ourse Ob	jectives						
The co	ourse air	ns to identify method	s of conductin	ng seminars and	d collecting research			
sources	s. and the	err scientific summaries	and narrative r	nethods.				
9. Ie	aching a	nd Learning Strategie	28 La definition of	aciontifia tonica	related to forests			
Enaom	ng studer	its to prepare a scientifi		scientific topics	related to forests			
10. Co	ourse Sti	ructure		1				
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method			
1	1	Identify ways. Selection of topics	Selection of topics	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports			
21Learn how to prepare applied curriculaDescription prepare applied curriculaLecture, presentations and interactive discussionVerbal, editorial, daily and monthly tests and scientific reports								
3	1	Recognize data collection methods	collection methods	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports			
4	1	Learn how to prepare research	prepare research	Lecture, presentations	Verbal, editorial, daily and monthly			

		hriafs	hriafs	and	tests and scientific	
		ULICIS	011018	interactive discussion	reports	
5	1	Learn how to review scientific sources	review scientific sources	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
6	1	Learn how to collect and analyses research data	analyses research data	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
7	1	Learn how to tab analyzed data	analyzed data	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
8	1	Identifying methods of analysis of their types	methods of analysis of their types	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
9	1	Learn how to interpret results	interpret results	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
10	1	Learn how to interpret research's scientific findings	research's scientific findings	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
11	1	Learn how to meet or list scientific information for research	list scientific information for research	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
12	1	Learn about the types of publishing methods and international and local magazines	international and local magazines	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
13	1	Learn how to evaluate	evaluate	Lecture,	Verbal, editorial,	
		research	research	presentations	daily and monthly	
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				and	tests and scientific	
				interactive	reports	
				discussion		
14	1	Learn about the final evaluation methods of articles	evaluation methods of articles	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
15	1	Knowledge of the student's final assessment	student's final assessment	Lecture, presentations and interactive discussion	Verbal, editorial, daily and monthly tests and scientific reports	
11.Course Evaluation						
The grade for the semester examination is (40%), divided into (10) grades for daily						
preparation, participation, and submitting reports, (30) grades for monthly exams, with two						
monthly exams for each exam (15) grades, and the grade for the final exam is (60%).						
12.Learning and Teaching Resources						
Requir	ed textbo	ooks (curricular books, if	any Lectures relevant	Lectures prepared by the teacher based on relevant books and references.		
Main references (sources)			Scientif 2016. Steps to Centre f	Scientific Research Directory, Riad Aziz Hadi, 2016. Steps to write scientific research, Al-Bayan Centre for Studies		
Recom	mended	books and references				
(scient	ific jourr	nals, reports)				
Electro	onic Refe	erences, Websites	Interna	International journals included in Scopus		