Course Description Form

1. Course Name:

Environment and climate

2. Course Code:

ENCL318

3. Semester / Year:

First semester / 2023-2024

4. Description Preparation Date:

1/2/2024

5. Available Attendance Forms:

Life in person

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

75 hr. / 3.5

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

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8. Course Objectives

Course Objectives

- Enable the student to understand and comprehend what is related to soil morphology and its relationship to soil science and water resources
- Enable the student to know the most important features of the stove
- Enable the student to become familiar with the most important factors affecting the development of horizons
- Empowering the student with the ability to detect diagnostic horizons
- The student can explain the development of horizons and address the differences in results for the future over time

practical:

- Enabling the student to become familiar with the most important laboratory methods in studying macro- and micro-morphological characteristics and the important chemical and physical analyzes in distinguishing and studying soil horizons.

9. Teaching and Learning Strategies

Strategy

- Interactive lecture
- Brainstorming
- Dialogue and discussion
- Assigning tasks and reporting
- Presentations of models of soil horiz and their detailed study

practical:

- Assigning group work to reveal leadership skills
- Assigning tasks and reporting for each experimen

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		Required	T I - 24		
Week	Hours	Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2+3	alLecture: knows the principles and foundations of environmental science, climate, and the components of society Familiarizes with the historical development of ecology and ocean factors ean A9 Practical: Recognizes the principles and foundations of environmental and climate science and related sciences	Lecture: Introduction to ecology, the historical development of ecology and ocean factors Practical: Principles and foundations of environmental and climate science	Auditory methods, writing style on the blackboard, direct dialogue method Practical: Assigning tasks and writing a report	Assignments, discussions, Quiz
2	2+3	a2Lecture: : Learn about the types of radiation Recognizes the importance of light for plants Familiarize yourself with the effect of light on plants and trees a10Practical: understands radiation, units of measurement for wavelengths	Lecture: energy (radiation) (Radiation) Practical: Elements of climate and its relationship to other sciences	Auditory methods, writing style on the blackboard, direct dialogue method Practical: Assigning tasks and writing a report	Assignments discussions, Quiz
3	2+3	a3Lecture: presents the factors affecting temperatures Shows the methods of heat flow It memorizes the	Lecture: Energy (temperatures) Practical: Ecosystem characteristics and temperatures	Auditory methods, writing style on the blackboard, direct dialogue method Practical: Assigning tasks and writing a	Juiz

			Т	To the state of th	
		preferred and		report	
1		unfavorable			
A I		temperatures of			
100		plants and			
		methods for			
		calculating them			
н		_B3Practical:			
		Temperatures,			
		their definition,			
4		and methods of			
		storing the			
		thermometers			
		used for			
		measurement			
		a4Lecture:		Auditory	
		Identify the		methods, writing	
		effects of		style on the	
		atmospheric		blackboard, direct	
		pressure and		dialogue method	
		identify the		Practical:	
		factors that affect		Assigning tasks	
		atmospheric		and writing a	
		pressure	.	report	
		Knows the	Lecture:		
		distribution of	Atmospheric		Assignments,
4	2+3	atmospheric	pressure		discussions,
	213	pressure.	Practical:		Quiz
		Recognizes the	Atmospheric		Qui2
		main ranges of	pressure		
		atmospheric			
		pressure	411		
		all Practical:			1
		Knows			
		atmospheric	9	Experie of the same	
		pressure, its units,	1		1
		and the factors			1
			1		ļ.
1		affecting it		Anditom	1
		a5Lecture: Learn	1	Auditory	
		about wind	1	methods, writing	
		movement	,	style on the	
		Explains the		blackboard, direct	
		types of wind and	I make to .	dialogue method	
		their damage	Lecture: Wind	Practical:	Assignments,
5	2+3	He is familiar	and its effects on	Assigning tasks	discussions,
3	∠⊤3	with the	plants	and writing a	
		movement of the	Practical: Wind	report	Quiz
		wind		-	
		a12 Practical:			26 702
		uses wind		جامعة الموصل	3
1		measurement		بة الزراعة والعابات في	باخ لإ
		methods and			1

		wind			
	7	wind speed measurement			
		units			
6	2+3	a6 Lecture: Explains the types of winds and their damage Knows air masses and fronts d4Practical: shows methods of wind measurement and wind speed measurement units with viewing devices	Lecture: Wind and its effects on plants Practical: Wind measurement methods	Auditory methods, writing style on the blackboard, direct dialogue method Practical: Assigning tasks and writing a report	Assignments, discussions, Quiz
7	2+3	a7 Lecture: Water and its quantity on the surface of the earth Water cycle in nature Water cycle diagram in nature and source A13Practical: Water knows its importance and distribution	Lecture: Water Practical: the importance of water	Auditory methods, writing style on the blackboard, direct dialogue method Practical: Assigning tasks and writing a report	Assignments, discussions, Quiz
8	2+3	a8 Lecture: Learn about atmospheric humidity Familiar with types of humidity A14 Practical: Knows relative humidity, its sources, and the factors affecting it	Lecture: Air humidity Practical: Relative humidity	Auditory methods, writing style on the blackboard, direct dialogue method Practical: Assigning tasks and writing a report	Assignments, discussions, Quiz
9	2+3	a2 1Lecture: Familiarity with the types of air humidity Forms of atmospheric	Lecture: Air humidity Practical: Relative humidity	Auditory methods, writing style on the blackboard, direct dialogue method Practical:	Assignments, discussions, Quiz

		humidity	_ 100 0 1 10 10	Assigning tasks	Training Charles to Bot
1	1	-15 D 1 - 1		and writing a	
100	l.	a15 Practical: is familiar with the		report	
		types of moisture			
		and methods of			
2		extracting it			
		b1 Lecture: The		Auditory	
		most important		methods, writing	
		types of		style on the	
		precipitation	Lecture: Rain	blackboard, direct	Assignments,
10	2+3	C3Practical:	Practical: Rain	dialogue method	discussions,
		installs a weekly	recorder	Practical:	Quiz
		and daily		Assigning tasks	
		Recording Rain		and writing a	
_		Geese		report	
		c1 Lecture:		Auditory	
		Distribution of rainfall in the		methods, writing style on the	
		world	Lecture: Rain	blackboard, direct	
		World	Practical:	dialogue method	Assignments,
11	2+3	d5 Practical:	Classifications	Practical:	discussions,
**	2.3	shows the	of biological	Assigning tasks	Quiz
		biological factors,	factors	and writing a	,
		their definition		report	
		and biological			
		divisions			Acres of the land
		c2 Lecture: Plant	1	Lecture:	7
		adaptation to	_ ' ',		
		water	Lecture: Plant		
-		c4 Practical:	adaptation to	-	Assignments,
12	2+3	Identifies clouds	water		discussions,
		and measures the	Practical: the	ALC TO THE RESERVE TO	Quiz
		height of the	clouds	7 - 1g	
	II .	cloud base and its			
		types		- management of the second	
		c1 Lecture:		Auditory	
		Understand plant		methods, writing	
2 15	1	adaptation to		style on the	
		water	Lecture: Plant	blackboard, direct	
			adaptation to	dialogue method	
		c5 Practical:	water	Practical:	Assignments,
13	2+3	The	Practical:	Assigning tasks	discussions,
		characteristics of	Ecosystem	and writing a	Quiz
		the ecosystem	components	report	
		justify its	Tomponomo		
		divisions and the		Mar - To	遵
		extent of its		جامعة الموصل	158
14	2+3	importance b2 Lecture:	Lecture: Plant	Auditory	Assignments,
17	213	02 Lecture.	Lecture. Frant	Multiory	1 1001611111111111111111111111111111111

1	TE WYTE	Learn about plant	odontoti 1		1 1	· · ·
		Learn about plant	adaptation to		hods, writing	1 ' 1
		adaptation to	water		e on the	Quiz
		water (aquatic	Practical:		kboard, direc	t
		plants).	Components of		ogue method	
		a16 Practical:	the atmosphere		ctical:	
		distinguishes the	and what ozone	Ass	igning tasks	
		layers of the	is made of	and	writing a	
		atmosphere, its		repo	ort	
-		components, its				
1		divisions, and the				
		specifications of				
		each layer				
		al Lecture:		Aud	litory	
		Learn about the		met	hods, writing	
		applied benefits		styl	e on the	
		of fires			kboard, direc	t
		Plant adaptations to fire Applied benefits of fires	Lecture: Fires		ogue method	
			and their types		ctical:	Assignments,
15	2+3		Practical: Forest fires		igning tasks	discussions,
				and	writing a	Quiz
			1 orest fires	repo	ort	
		a17 Practical:				
		classifies forest				
		fires by their				
		types and severity				
	T = 1	1	Course Evaluation	***************************************	Cuada	Dalativa vysiaht
No		uation methods	Evaluation dat	e	Grade	Relative weight
1		tical final report +	week 15		7+	13 %
	practical	experience reports	week 15	111111111111111111111111111111111111111	6	
2		Quiz (1)	Week 3		4+	6 %
	Quiz (1)		11 0012 0		2)	0 / 0
				and from the	2	9 70
3	Mi	dterm Exam	Week 9	and the ride of	10+	15 %
3	Mi	dterm Exam	Week 9	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10+ 5	
3	Mi	dterm Exam Quiz (2)	Week 9 Week 12		10+ 5 4+	
4		Quiz (2)	Week 12		10+ 5 4+ 2	15 % 6 %
4 5	Final	Quiz (2) practical Exam	Week 12 Exam week	ale	10+ 5 4+ 2 20	15 % 6 % 20 %
4	Final	Quiz (2) practical Exam Final Exam	Week 12	ek	10+ 5 4+ 2 20 40	15 % 6 % 20 % 40 %
4 5	Final	Quiz (2) practical Exam Final Exam Total	Week 12 Exam week Final Exam wee		10+ 5 4+ 2 20 40 100	15 % 6 % 20 %
4 5 6	Final I	Quiz (2) practical Exam Final Exam Total Learnin	Week 12 Exam week Final Exam week g and Teaching Re	sourc	10+ 5 4+ 2 20 40 100	15 % 6 % 20 % 40 % 100 %
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4 5 6	Final I	Quiz (2) practical Exam Final Exam Total Learnin ooks (curricular book any)	Week 12 Exam week Final Exam week g and Teaching Re s, if Ecology, H	source likma press	10+ 5 4+ 2 20 40 100 es t A. Al-ani ar ,university o	15 % 6 % 20 % 40 % 100 % ad Raad H. Baker f mosul ,2014
4 5 6 Requ	Final I ired textbo	Quiz (2) practical Exam Final Exam Total Learnin ooks (curricular book any) erences (sources)	Week 12 Exam week Final Exam week g and Teaching Res, if Ecology, Formula, second	esource Iikma press Jou	10+ 5 4+ 2 20 40 100 es t A. Al-ani ar ,university o	15 % 6 % 20 % 40 % 100 % and Raad H. Baker f mosul ,2014
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