Course Description Form Soli Ecology and Meteorology

1. Course Name:

Soli Ecology and Meteorology

2. Course Code:

SOEM210

3. Semester / Year:

Second semester/ 2024-2025

4. Description Preparation Date:

15/01/2025

5. Available Attendance Forms:

Full time (theoretical lecture and practical lecture) weekly

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

5 hours (2 hours theoretical and 3 hours practical per week) for 14 weeks, num of units 3.5 units

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

Name: Dr.Osama Ghazi Ismaeel

Email: osamaghaze@uodiyala.edu.iq

8. Course Objectives

	1- Study of Ecology, Ecosystem and Environmenal factors		
	Physical Properties of the soil		
Course Objectives	2- Biotic and Abiotic components		
oourse objectives	3-Soil		
	4- Temperature, moisture, Light and Rain		
	5- Frost and Wind		
	6- Pollution, Desertification and Global Warming		

9. Teaching and Learning Strategies

Strategy

In-person lectures for 15 weeks, including two monthly exams, daily exams, and scientific reports

10. Course Structure

Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	2	The environment and its relationship with humans	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

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2	2	The environment and its relationship with humans	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	2	Eceology and Ecosystem	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
4	2	Climate , Climate cycle , Soil climate	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
5	2	Energy radiation Temperature Winds Atmospheric pressure	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
6	2	Water, the relationship of water to plants, humidity	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
7	2	fog and Evaporation	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
8	2	Environmenal Properties fo the soil	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
9	2	Soil Moisture Content	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
10	2	Soil air and aeration	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
11	2	Soil Structure	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports

Soli Ecology and Meteorology		T			_		
13 2 Vegetation Soli Ecology and Meteorology Dialogue & discussion Brainstorming Daily, monthly and final exam and daily reports	12	2	Soil texture		discussion	_	
14 2 Pollution Soli Ecology and discussion Brainstorming Daily, monthly and final exame and daily reports	13	2	Vegetation		Dialogue & discussion	_	
15 2 Human role in the environment Soli Ecology and Meteorology Dialogue & discussion Brainstorming Daily, monthly and final exame and daily reports 1 3 Eceology and environment factor Soli Ecology and Meteorology Daily, monthly and final exame and daily reports 2 3 Temperature measuring devices Soli Ecology and Meteorology Daily, monthly and final exame and daily reports 3 Solar radiation measuring devices Soli Ecology and Meteorology Lecture Dialogue & discussion Brainstorming Daily, monthly and final exame and daily reports 4 3 Humidity measuring Soli Ecology and Meteorology Daily, monthly and final exame and daily reports 4 3 Humidity measuring Soli Ecology and discussion Brainstorming Daily, monthly and final exame and daily reports 5 Cology and Daily, monthly and final exame and daily reports 6 Cology and Daily, monthly and final exame and daily reports 6 Cology and Daily, monthly and final exame and daily reports 7 Cology and Daily, monthly and final exame and daily reports 8 Cology and Daily, monthly and final exame and daily reports 8 Cology and Daily, monthly and final exame and daily reports 8 Cology and Daily, monthly and final exame and daily reports 9 Cology and Daily, monthly and final exame and daily reports 9 Cology and Daily, monthly and final exame and daily reports 9 Cology and Daily, monthly and final exame and daily reports 1 Cology and Daily, monthly and final exame and daily reports 1 Cology and Daily, monthly and final exame and daily reports 1 Cology and Daily, monthly and final exame and daily reports 1 Cology and Daily, monthly and final exame and daily reports 2 Cology and Daily, monthly and final exame and daily reports 2 Cology and Daily, monthly and final exame and daily reports 2 Cology and Daily, monthly and final exame and daily reports 3 Cology and Daily, monthly and final exame and daily reports	14	2	Pollution	33	Dialogue & discussion	•	
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devices Meteorology Brainstorming and daily reports	4	3	, ,		Dialogue & discussion	Daily, monthly and final exams and daily reports	
	5	3	Rain measuring devices		Dialogue & discussion	•	

3	Winds measuring devices	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	Atmospheric pressure measuring devices	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	Evaporation and measuring devices	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	Devices for measuring soil properties	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	Natural plant environments in the world and Iraq	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	Desertification in the Iraq and world	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	Aquatic ecosystem	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
3	Vegetation in Iraq and the world	Soli Ecology and Meteorology	Lecture Dialogue & discussion Brainstorming	Daily, monthly and final exams and daily reports
	3 3 3 3	Atmospheric pressure measuring devices Evaporation and measuring devices Devices for measuring soil properties Natural plant environments in the world and Iraq Desertification in the Iraq and world Aquatic ecosystem Vegetation in Iraq and the	Atmospheric pressure measuring devices Soli Ecology and Meteorology Evaporation and measuring devices Soli Ecology and Meteorology Soli Ecology and Meteorology Natural plant environments in the world and Iraq Desertification in the Iraq and world Aquatic ecosystem Soli Ecology and Meteorology Soli Ecology and Meteorology	Atmospheric pressure measuring devices Soli Ecology and Meteorology Soli Ecology and Meteorology Soli Ecology and Meteorology Evaporation and measuring devices Soli Ecology and Meteorology Soli Ecology and Meteorology Devices for measuring soil properties Soli Ecology and Meteorology Soli Ecology and Meteorology Soli Ecology and Meteorology Natural plant environments in the world and Iraq Soli Ecology and Meteorology Soli Ecology and Meteorology Soli Ecology and Meteorology Soli Ecology and Meteorology Lecture Dialogue & discussion Brainstorming Lecture Dialogue & discussion Brainstorming

14 3 field experiment Soli Ecology and Meteorology Brainstorming Lecture Dialogue & Daily, me and final discussion Brainstorming report								
15	3	visit to a weather station	Soli Ecology and Meteorology Daily, monthly and final exams and daily reports					
11.	11. Course Evaluation							
Examination Monthly & daily exams with discussion questions inside the lecture. The degree of participation in the questions related to the subject.								
12. Learning and Teaching Resources								
Required textbooks (curricular books, if any								
Main references (sources)								
Recommended books and references (scientific journals, reports)								
Electron	nic Refere	ences, Websites	Soil Science Society of America Library Genesis					