Course Description Form of Soil survey and classification

1. Course Name:	
Soil survey and classification	
2. Course Code:	
SOSC403	
3. Semester / Year:	
First semester/ 2024-2025	
4. Description Preparation Date:	
15/1/2025	
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, number of units 3.5 units	
7. Course Administrator's Name (Mention All, If More Than One Name)	
Name: Phd. Ibraheem Ahmad Hdraes Email: ibraheeahmad@uodiyala.edu.iq	
8. Course Objectives	
Course Objectives: Graduating students who are able to:	1-Knowledge of soil development 2-Distinguishing between soil horizons and diagnosing them 3 -Preparing soil survey maps 4-Knowing the most influential factors on the development of soils and distinguishing their horizons
9. Teaching and Learning Strategies	

Strategy	In-person lectures for 14 weeks, including two monthly exams, daily exams, and scientific reports

10. Course Structure

Theoretical part

Week	Hours	Required learning outcomes	Unit or Subject	Learning Method	Evaluation Method
1	**2**	A historical overview of the classification of soils in the world	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
2	**2**	The relationship between pedological sciences and the objectives of the classification year	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
3	**2**	Horizons: genetic horizons	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
4	**2**	Superficial and subsurface diagnostic horizons	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
5	**2**	Genetic systems for soil classification: Russian systems	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
6	**2**	Canadian regulations, FAO system, WRB	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
7	**2**	The old American system	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
8	**2**	American quantitative system	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
9	**2**	The structure of the system and the foundations for determining annual terms	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports

10	**2**	Inheritance and distinctive characteristics of soil classes	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
11	**2**	Inheritance and distinctive characteristics of soil classes	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
12	**2**	Soil survey: concept and objectives	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
13	**2**	Degrees and survey work	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
14	**2**	Soil maps and soil survey report	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
15	**2**	Land classification and uses	Soil survey and classification	**Lecture Dialogue & discussion Brainstorming**	Daily, monthly and final exams and daily reports
Practical part					
Week	**Hours**	**Required learning outcomes**	**Unit or Subject Name**	**Learning Method**	**Evaluation Method**
1	**3**	Field applications for describing soil profile	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
2	**3**	How to prepare and interpret soil maps	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
3	**3**	Interpreting aerial photographs and using them as maps	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
4	**3**	Step factor and drawing scale	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
5	**3**	Soil survey tools and how to record information	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports

6	**3**	Comparing Iraqi and international soil survey reports	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
7	**3**	Implementing field sweeping works	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
8	**3**	Implementing field sweeping works	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
9	**3**	Implementing field sweeping works	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
10	**3**	Preparing a soil survey report	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
11	**3**	Interpreting soil survey results and preparing maps	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
12	**3**	Interpreting soil survey results and preparing maps	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
13	**3**	Characteristics of Iraqi soil units	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports
14	**3**	Preparing the distribution chart for Iraqi soil units	Soil survey and classification	**Observation Dialogue & discussion**	Daily, monthly and final exams and daily reports

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 Sources

Required Textbooks (Curricular Books, If Any)	1- Soil survey and classification. Dr. Ahmed Saleh Muhaimid 1994.
Main References (Sources)	2- Pedology. Soil survey and classification. Dr. Walid Khaled Hassan Al-Akidi. 1986.

Recommended Books and References (Scientific Journals, Reports...)	3- Soil genesis and classification, Boul, et.al. 2005
Electronic References, Websites	