Course Description Form

1. Course Name:

Alteration and Leveling of land

2. Course Code:

ALLA236

3. Semester / Year:

first Semester / 2024-2025

- 4. Description Preparation Date:
 - 1/2/2025
- 5. Available Attendance Forms:

Attendance + online

- 6. Number of Credit Hours (Total) / Number of Units (Total)
- 2 Theory + 3 practical / 3.5 units
- 7. Course administrator's name (mention all, if more than one name)

Name: Dr. Haees Savel Jaries

Email: haees sayel@uomosul.edu.iq

8. Course Objectives

Theory:

paring agricultural cadres capable of dealing h the problems of land settlement and dification, especially the problems resulting m meanders, undulations, rise and fall, digging d backfilling

paring qualified agricultural cadres to use -2 entific programs that contribute to removing nt materials from their roots, because their sence negatively affects the construction work sequent to the leveling process, as the presence hese materials or backfilling on top of them ds to the lack of the filled surface after a period time

3- Follow up on the performance of graduates fields and lands and the extent to which graduat specifications match the needs of projects and extent of implementation and application of w has been studied in the field of work.

9. Teaching and Learning Strategies

Strategy

- -Interactive lecture
- -Brainstorming
- -Dialogue and discussion
- Assigning tasks and reporting

10. Course Structure

Practical:

bling the student to practically address the blems of land settlement and modification Preparing qualified cadres to use scient programs and following up on the performance graduates in fields and lands and the extent which graduates' specifications match the needs projects and the extent of implementing applying what has been studied in the field of wo



Veek	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
	-	a1 Learns about concept of settlement a land modification - w is the level - numbe north point - ot definitions. Practical: a11 Familiar with gene	practical: General definitions include normalization - methods for finding relative relationships between the heights of	Theory: In-person lectures Practical: In-person lectures with field visits	Discussions and interaction in the lecture and a shottest
2	2Theory 3 Pract	Theory: A2 is familiar with drawing natural longitudinal sections practical: b3 Apply how to find levels using the sight line height method	Theory: Drawing natural longitudinal sections practical: Finding levels using height of sight line	Theory: In-person lectures Practical: In-person lectures with field visits	Quotes and interaction in the lecture Short test
3	2Theor 3 Pract	Theory: a 4 Learn about drawing design longitudinal sections practical: b4 Apply how to find levels using the rise and fall method	longitudinal sections practical: Finding levels using	Theory: In-person lectures Practical: In-person lectures with field visits	Short test Direct drawing
4	2Theor 3 Pract	y Theory:	Theory: Methods of calculating excavation and backfilli from longitudinal section practical: Drawing natural longitudinal sections	Theory: In-person lectures with field visits Practical: In-person lectures with field visits	Field evaluation Direct drawing
5	2Theor		Theory: Cross sections and earthwork calculations practical: Drawing design longitudinal sections		Short test Direct drawing

	2Theory 3 Pract	a 6 Understands what grid settlement is practical: c6 Calculates excavatio and backfilling from longitudinal sections	Theory: Soil building practical: Estimation of calcium carbonate in the soil	Theory: In-person lectures with field visits Practical: In-person lectures with field visits	
7	2Theory 3 Pract	a 7 compares the first a second cases of grid regularization practical: C7 Draws cross-section and methods of earthwork calculations therein	in the soil	Theory: In-person lectures with field visits Practical: In-person lectures with field visits	Short test Direct drawing
8	2Theory 3 Pract	Theory: a9 Explains grid leveling the second case, the	second case is the trian method - the third case excavation and backfilli at the same time practical:	Practical: In-person lectures with field visits	Short test Direct drawing
9	2Theory 3 Pract	Theory: a3Determines the contour lines - the contour interval - the factors on which the choice of the contour interval depends - the specifications of the contour lines practical: a11 Learn about grid leveling - the second cathe triangle method - contour lines	Theory: Contour lines - the contour interval - the factors on which the choice of the contour interval depends - specifications of the contour lines Grid leveling - the secor practical: case, the method triangles - contour lines	Theory: In-person lectures with field visits Practical: In-person lectures with field visits	Short test Direct drawing
10	2Theory 3 Pract	Theory: b1 will work and draw the contour lines in the direct way practical: a12 Familiarizes with t specifications of contou	Theory: Preparing contour map first the direct method practical: Specifications of cont lines	In-person lectures with field visits	Short test Direct drawing

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Half exam (theory + pract.)	Week (9)	10 Theory + 5 pract. 4 Theory +	% 15		
Short exam (2)			% 6		
Final exam (practical)	Exam pract.	20	% 20 % 40		
Final exam (theory)	Exam theory	40			
111111111111111111111111111111111111111		100	% 100		
12. Learning and Teaching	Resources				
Required textbooks (curricular	books, if any)				
Main references (sources)		Book (Soil Science) Dr. Abduallah Al-Aani			
Recommended books and refojournals, reports)	erences (scientific	Book (Environmental chemistry of Soil) and (Soil Chemistry)			
Electronic References, Website	es	Sposito, G. (2008). The ch	emistry of soil. Oxf		

مدرس المادة النظري: د. هايس صايل جرجيس

مدرس المادة العملي : م.م. حامد

ابراهيم

الكائن والات الزراعية رئيس فسم المكانن والالات الزراعية

ا.م. نوفل عیسی محیمید

رئيس اللجنة العلمية

أ.د. عادل احمد عبد الله