

Course Description Form

1. Course Name:					
Surveying					
2. Course Code:					
SURV120					
3. Semester / Year:					
Autumn semester/ 2023-2024					
4. Description Preparation Date:					
1 / 9 / 2023					
5. Available Attendance Forms:					
Attendance					
6. Number of Credit Hours (Total) / Number of Units (Total)					
1 Theoretical + 3 practical / 2.5 units					
7. Course administrator's name (mention all, if more than one name)					
Name: Dr. Karam Ali Younus ALtaee Email: karam.youns@uomosul.edu.iq Name: Hamed Muhammad Ibrahim					
8. Course Objectives					
theoretical: - Developing the student's ability to deal with scientific and technical means - Developing the student's ability to deal with the Internet - Developing the student's ability to deal with multiple media. - Developing the student's ability to dialogue and discuss Developing the student's ability to deal economically in the field the job.			Practical : -Developing the student's ability to deal with multiple media. - Developing the student's ability to dialogue and discuss		
9. Teaching and Learning Strategies					
Strategy		-Interactive lecture, Brainstorming, - Dialogue and discussion, - Assigning tasks and reporting - Assigning group work to reveal leadership skills			
10. Course Structure					
Week	Hours	Required Learning Outcomes	Unit or subject name	Learning method	Evaluation method
1	1 theoretical 3 Pract.	theoretical: a1: A historical overview of surveying (the science of surveying is known - what are the types of surveying, surveying, units of measurement) practical : a9: Explains (settlement balance)	theoretical: : space and its importance practical : Identify surveying devices	theoretic -Auditor methods, -Style of writing c The blackboa	Exams, Homework, Reports

		<p>a10: Explains (leveling screws) a11: Explains (the pillar) a12: Understand (endoscope)</p>		<p>-Direct dialogue style Practical Assignin tasks and repo</p>	
2	1 theoretical 3 Pract	<p>theoretical: a2: Familiar with drawing standards, t types, and methods of using them practical : b4: apply (use tape) b5: Use (the measuring wheel) b6: Explains (the use of signs)</p>	<p>Theoretical: drawing scales practical : Tools for direct measuring distances</p>	<p>Theory : -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo</p>	Exams, Homework, Reports
3	1 theoretical 3 Pract	<p>theoretical: c1: Calculates (methods for estimating lengths of distances - sources of measu distances, direct measurement methods practical a13: Explains (the use of sig Explains (the use of signs) a14: Explains (the use of arrows) a15: Explains the use of wedges</p>	<p>theoretical: Direct measurement distances practical : Direct measuring tools accessories</p>	<p>theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo</p>	Exams, Homework, Reports
4	1 theoretical 3 Pract	<p>theoretical: b1: The measurement of distances applied (what are the types of measu chain and tape - mention the accesso for direct measurement with the chair tape) practical : a16: Concerned with (measuring horizontal distance on flat land)</p>	<p>theoretical: Metal chain and ribbon practical : Measuring horizontal distances</p>	<p>theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo</p>	Exams, Homework, Reports
5	1 theoretical 3 Pract	<p>theoretical: c2: Calculates (measuring horizo distances on flat land) practical : b7: Contributes to the application of</p>	<p>theoretical: Measuring horizontal distances practical : Measuring horizontal</p>	<p>theoretic -Auditor methods, -Style of writing c</p>	Exams, Homework, Reports

		measuring horizontal distance on inclined lands (terraces).	distances on sloping terrain	The blackboard -Direct dialogue style Practical Assignments tasks and reports	
6	1 theoretical 3 Pract	theoretical: c3: Calculate the horizontal distance on sloping terrain (angle method - trigonometric method - right triangle method) practical : b8: Measures (an obstacle that prevents monitoring but does not prevent measurement (ground elevation))	theoretical: Measuring horizontal distances on sloping terrain practical : Measure distances across obstacles	theoretical: -Auditor methods, -Style of writing on the blackboard The blackboard -Direct dialogue style Practical Assignments tasks and reports	Exams, Homework, Reports
7	1 theoretical 3 Pract	theoretical: a7: Describes (what are its sources, number of types, mention its treatments) practical : b9: measures (an obstacle that prevents measurement, does not prevent monitoring, and cannot be circumvented (river, watercourse))	Theoretical: accuracy and error in measuring distances practical : Measure distances across obstacles	theoretical: -Auditor methods, -Style of writing on the blackboard The blackboard -Direct dialogue style Practical Assignments tasks and reports	Exams, Homework, Reports
8	1 theoretical 3 Pract	theoretical: A5: Explains (an obstacle that prevents monitoring but does not prevent measurement (ground elevation) - obstacle that prevents measurement but does not prevent monitoring and can be circumvented (the wide hole, small lakes, the edges of large lakes and ponds)) practical : b10: measures (an obstacle that prevents measurement and monitoring and can be circumvented (rock, lake))	theoretical: Measure distances across obstacles practical : Measure distances across obstacles	theoretical: -Auditor methods, -Style of writing on the blackboard The blackboard -Direct dialogue style Practical Assignments tasks and reports	Exams, Homework, Reports
9	1 theoretical 3 Pract	theoretical: a6: Explains (an obstacle that prevents measurement, does not prevent monitoring)	theoretical: Measuring distances across obstacles	theoretical: -Auditor methods,	Exams, Homework, Reports

		<p>monitoring, and cannot be circumvented (river, watercourse, trenches) - an obstacle that prevents measurement and prevents monitoring (building, protruding rock))</p> <p>practical</p> <p>a17: Explains (exploring the area)</p> <p>a18: Explains (selection of stations)</p> <p>b11: applied (marking stations)</p> <p>b12: Apply to use (measure distances)</p>	<p>practical :</p> <p>Chain scanning steps</p>	<p>-Style of writing on the blackboard</p> <p>The blackboard</p> <p>-Direct dialogue style</p> <p>Practical Assignments tasks and reports</p>	
10	1 theoretical 3 Pract	<p>theoretical:</p> <p>a7: Describes (control and investigation lines, survey steps, field notebook)</p> <p>practical :</p> <p>a19: Identify (a diagram of the survey lines and the name of the site)</p> <p>a20: Verify (date of field work carried out)</p> <p>a21: Write (the names of the field work team)</p>	<p>theoretical:</p> <p>Chain scanning</p> <p>practical :</p> <p>Contents of the field notebook</p>	<p>theoretical:</p> <p>-Auditor methods</p> <p>-Style of writing on the blackboard</p> <p>The blackboard</p> <p>-Direct dialogue style</p> <p>Practical Assignments tasks and reports</p>	Exams, Homework, Reports
11	1 theoretical 3 Pract	<p>theoretical:</p> <p>b2: I implement (series mapping method - a scientific visit to the Department of Roads and Bridges)</p> <p>practical:</p> <p>b13: Draw (straight boundaries with obstacles within the space)</p> <p>b14: Draw (straight boundaries with obstacle inside the space)</p> <p>b15: Draw (non-straight boundaries with no obstacles within the space)</p> <p>b16: Draw (non-straight boundaries with an obstacle inside the space)</p>	<p>theoretical:</p> <p>Chain scanning</p> <p>practical :</p> <p>Chain scanning methods</p>	<p>theoretical:</p> <p>-Auditor methods</p> <p>-Style of writing on the blackboard</p> <p>The blackboard</p> <p>-Direct dialogue style</p> <p>Practical Assignments tasks and reports</p>	Exams, Homework, Reports
12	1 theoretical 3 Pract	<p>theoretical:</p> <p>c4: It works (the basis of measurement what are the optical devices)</p> <p>practical:</p> <p>a22: Learn (the board and the triple ruler)</p> <p>a23: Learn (orientation ruler and drawing board)</p> <p>a24: Rivet (leveling bubble and scale ruler)</p>	<p>theoretical:</p> <p>Indirect measurement distances</p> <p>practical :</p> <p>Plane plate parts</p>	<p>theoretical:</p> <p>-Auditor methods</p> <p>-Style of writing on the blackboard</p> <p>The blackboard</p> <p>-Direct dialogue style</p> <p>Practical Assignments tasks and reports</p>	Exams, Homework, Reports

13	1 theoretical 3 Pract	theoretical: c5: implements (measurement ba electronic devices) practical : c1: applied (use tachometer) c2: The use of (theodolite) is applied.	theoretical: Indirect measurement distances practical : Indirect measuring dev and tools	theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
14	1 theoretical 3 Pract	theoretical: a8: Identify (definitions of leve devices, uses of leveling devices) practical : a25: Learn (an error in the length of instrument and failure to adjust measurement times) a26: Identify (non-straightness of measuring line and non-straightness of measuring tool) a27: It records (an error in recording da a difference in the intensity of pulling c tightening the measuring instrument, at a difference in temperature)	theoretical: Settlement practical : Some sources of errors wh measuring	theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
15	1 theoretical 3 Pract	theoretical: b3: Apply (methods for calculating lev practical : b17: Applies (field visits to some s agricultural departments, such as Nine Agriculture, to learn about their survey tools and benefit from some rec experiences about field measurements the obstacles they suffer from)	theoretical: Settlement practical : Field and field visits	theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports

11. Course Evaluation

Evaluation Methods	Evaluation Date	Degree	Relative weight %
Final report theoretical + pract. Report	theoretical 15 weeks Pract. 1-15 week	7 theoretical + 6 pract.	% 13
Short exam (1)	Week (3)	4 theoretical + 2 pract.	% 6
Half exam (theoretical + pract.)	Week (9)	10 theoretical + 5 pract.	% 15
Short exam (2)	Week (12)	4 theoretical + 2 pract.	% 6
Final exam (practical)	Exam pract.	20	% 20

	Final exam (theoretical)	Exam theoretical	40	% 40
			100	% 100
12. Learning and Teaching Resources				
	Required textbooks (curricular books, if any)	Book on the foundations of plane space and topography. R Saleh Al-Khafaf		
	Main references (sources)	Books related to flat space		
	Recommended books and references (scientific journals, reports...)	All sites related to space and topography		

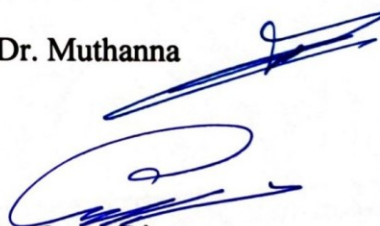
Theoretical subject teacher: Dr. Name: Dr. Karam Ali Younus ALtaee



Practical subject teachers: M.M. Hamed Muhammad Ibrahim



Chairman of the Scientific Committee: Prof. Dr. Muthanna Ahmed Muhammad Tayyib



Head of Animal Production Sciences: Prof. Dr. Omar Diaa Muhammad