



Course Description Form

1. Course Name:					
Surveying					
2. Course Code:					
SURV120					
3. Semester / Year:					
Autumn semester/ 2023-2024					
4. Description Preparation Date:					
1 / 2 / 2024					
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.	<p>theoretical: a1: A historical overview of surveying (the science of surveying is known - what are the types of surveying, surveying, units of measurement)</p> <p>practical : a9: Explains (settlement balance) a10: Explains (leveling screws) a11: Explains (the pillar) a12: Understand (endoscope)</p>	<p>theoretical: : space and its importance</p> <p>practical : Identify surveying devices</p>	<p>theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo</p>	Exams, Homework, Reports
2	1 theoretical 3 Pract	<p>theoretical: a2: Familiar with drawing standards, types, and methods of using them</p> <p>practical : b4: apply (use tape) b5: Use (the measuring wheel) b6: Explains (the use of signs)</p>	<p>Theoretical: drawing scales</p> <p>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 measurement distances, direct measurement methods)</p> <p>practical a13: Explains (the use of signs) Explains (the use of signs) a14: Explains (the use of arrows) a15: Explains the use of wedges</p>	<p>theoretical: Direct measurement distances</p> <p>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 measurement chain and tape - mention the accessories for direct measurement with the chain and tape)</p> <p>practical : a16: Concerned with (measuring horizontal distance on flat land)</p>	<p>theoretical: Metal chain and ribbon</p> <p>practical : Measuring horizontal distances</p>	<p>theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin</p>	Exams, Homework, Reports

				tasks and reports	
5	1 theoretical 3 Pract	theoretical: c2: Calculates (measuring horizontal distances on flat land) practical : b7: Contributes to the application of measuring horizontal distance on inclined lands (terraces).	theoretical: Measuring horizontal distances practical : Measuring horizontal distances on sloping terrain	theoretical: -Auditor methods, -Style of writing on The blackboard -Direct dialogue style Practical Assignments tasks and reports	Exams, Homework, Reports
6	1 theoretical 3 Pract	theoretical: c3: Calculate the horizontal distance on sloping terrain (angle method - tangent 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 -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 -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 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	theoretical: Measure distances across obstacles practical : Measure distances across obstacles	theoretical: -Auditor methods, -Style of writing on The blackboard -Direct dialogue style	Exams, Homework, Reports

		measurement and monitoring and can circumvented (rock, lake))		Practical Assignin tasks and repo	
9	1 theoretical 3 Pract	theoretical: a6: Explains (an obstacle that prevents measurement, does not prevent monitoring, and cannot be circumvented (river, watercourse, trenches) - an obstacle that prevents measurement and prevents monitoring (building, protruding rock)), practical a17: Explains (exploring the area) a18: Explains (selection of stations) b11: applied (marking stations) b12: Apply to use (measure distances	theoretica: Measuring distances across obstacles practical : Chain scanning steps	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
10	1 theoretical 3 Pract	theoretical: a7: Describes (control and investigation lines, survey steps, field notebook) practical : a19: Identify (a diagram of the survey lines and the name of the site) a20: Verify (date of field work carried out) a21: Write (the names of the field work team	theoretical: Chain scanning practical : Contents of the field notebook	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
11	1 theoretical 3 Pract	theoretical: b2: I implement (series mapping method - a scientific visit to the Department Roads and Bridges) practical: b13: Draw (straight boundaries with obstacles within the space) b14: Draw (straight boundaries with obstacle inside the space) b15: Draw (non-straight boundaries with no obstacles within the space) b16: Draw (non-straight boundaries with an obstacle inside the space)	theoretical: Chain scanning practical : Chain scanning methods	theoretic -Auditor methods, -Style of writing o The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
12	1 theoretical 3 Pract	theoretical: c4: It works (the basis of measurement, what are the optical devices) practical: a22: Learn (the board and the triple rule) a23: Learn (orientation ruler and draw	theoretical: Indirect measurement distances practical : Plane plate parts	theoretic -Auditor methods, -Style of writing o The blackboa	Exams, Homework, Reports

		board) a24: Rivet (leveling bubble and scale ruler)		-Direct dialogue style Practical Assignin tasks and repo	
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 o 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 o tightening the measuring instrument, at a difference in temperature)	theoretical: Settlement practical : Some sources of errors wh measuring	theoretic -Auditor methods, -Style of writing o 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 o 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

نموذج وصف المقرر



مدرس المادة النظري : د. كرم علي يونس الطائي



مدرس المادة العملي : م.م. حامد محمد ابراهيم

رئيس اللجنة العلمية : أ.د. نبيل محمد امين الامام



رئيس الهيئة وهندسة الحدائق : أ.د. اسماء محمد عائل