

Course Description Form

1. Course Name:					
Surveying					
2. Course Code:					
SURV120					
3. Semester / Year:					
First fall 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)					
The total number of hours is 60 hours 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: Muhammad Samir Idris					
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	Learn ing metho d	Evaluation method
1	1 theoretical 3 Pract.	theoretical: a1: A historical overview of surveying (the science of surveying is known - v 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

		a10: Explains (leveling screws) a11: Explains (the pillar) a12: Understand (endoscope)		-Direct dialogue style Practical Assignin tasks and repo	
2	1 theoretical 3 Pract	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)	Theoretical: drawing scales practical : Tools for direct measuring distances	Theory : -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
3	1 theoretical 3 Pract	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	theoretical: Direct measurement distances practical : Direct measuring tools accessories	theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
4	1 theoretical 3 Pract	theoretical: b1: The measurement of distances applied (what are the types of measu chain and tape - mention the accesso for direct measurement with the chain tape) practical : a16: Concerned with (measuring horizontal distance on flat land)	theoretical: Metal chain and ribbon practical : Measuring horizontal distances	theoretic -Auditor methods, -Style of writing c The blackboa -Direct dialogue style Practical Assignin tasks and repo	Exams, Homework, Reports
5	1 theoretical 3 Pract	theoretical: c2: Calculates (measuring horizo distances on flat land) practical : b7: Contributes to the application of	theoretical: Measuring horizontal distances practical : Measuring horizontal	theoretic -Auditor methods, -Style of writing c	Exams, Homework, Reports

		measuring horizontal distance on inclined lands (terraces).	distances on sloping terrain	The blackboard -Direct dialogue style Practical Assigning 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: -Auditing methods -Style of writing on the blackboard The blackboard -Direct dialogue style Practical Assigning tasks and reports	Exams, Homework, Reports
7	1 theoretical 3 Pract	theoretical: a7: Describes (what are its sources, number of types, mention its treatment) 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: -Auditing methods -Style of writing on the blackboard The blackboard -Direct dialogue style Practical Assigning 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 measurement and monitoring and can be circumvented (rock, lake))	theoretical: Measure distances across obstacles practical : Measure distances across obstacles	theoretical: -Auditing methods -Style of writing on the blackboard The blackboard -Direct dialogue style Practical Assigning tasks and reports	Exams, Homework, Reports
9	1 theoretical 3 Pract	theoretical: a6: Explains (an obstacle that prevents measurement, does not prevent	theoretical: Measuring distances across obstacles	theoretical: -Auditing methods	Exams, Homework, Reports

		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)	practical : Chain scanning steps	-Style of writing on The blackboard -Direct dialogue style Practical Assignments tasks and 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	theoretical: -Auditor methods -Style of writing on The blackboard -Direct dialogue style Practical Assignments tasks and reports	Exams, Homework, Reports
11	1 theoretical 3 Pract	theoretical: b2: I implement (series mapping method - a scientific visit to the Department of 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	theoretical: -Auditor methods -Style of writing on The blackboard -Direct dialogue style Practical Assignments tasks and reports	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 drawing board) a24: Rivet (leveling bubble and scale ruler)	theoretical: Indirect measurement distances practical : Plane plate parts	theoretical: -Auditor methods -Style of writing on The blackboard -Direct dialogue style Practical Assignments tasks and reports	Exams, Homework, Reports

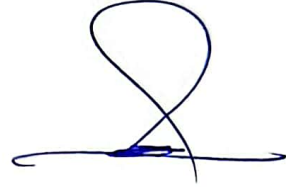
13	1 theoretical 3 Pract	theoretical: c5: implements (measurement by electronic devices) practical : c1: applied (use tachometer) c2: The use of (theodolite) is applied.	theoretical: Indirect measurement distances practical : Indirect measuring devices and tools	theoretical: -Auditor methods -Style of writing on the blackboard -Direct dialogue style Practical Assigning tasks and reports	Exams, Homework, Reports
14	1 theoretical 3 Pract	theoretical: a8: Identify (definitions of leveling 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 data a difference in the intensity of pulling or tightening the measuring instrument, and a difference in temperature)	theoretical: Settlement practical : Some sources of errors while measuring	theoretical: -Auditor methods -Style of writing on the blackboard -Direct dialogue style Practical Assigning tasks and reports	Exams, Homework, Reports
15	1 theoretical 3 Pract	theoretical: b3: Apply (methods for calculating leveling) practical : b17: Applies (field visits to some agricultural departments, such as Nine Agriculture, to learn about their surveying tools and benefit from some real experiences about field measurements and the obstacles they suffer from)	theoretical: Settlement practical : Field and field visits	theoretical: -Auditor methods -Style of writing on the blackboard -Direct dialogue style Practical Assigning tasks and reports	Exams, Homework, Reports

11. Course Evaluation

	Evaluation methods	Evaluation date (week)	Degree	Percentage weight %
1	Report 1	Fourth week	2.5	2.5
2	Report 2	Fifth week	2.5	2.5
3	Short test (1) Quiz	Sixth week	2	2
4	Short test (2) Quiz	Fourteenth week	2	2
5	Short test (3) Quiz	Fifteenth week	1	1
6	Semester test (1)	Sixth week	7.5	7.5
7	Semester test (2)	Eleventh week	7.5	7.5
8	Final theoretical test	Final semester test	40	40
9	Practical field project	The fifteenth week	5	5
10	Field evaluation	Third and fifth week	2	2

11	Practical short test (1) Quiz	First week	1	1
12	Short practical test (2) Quiz	Fourth week	0.5	0.5
13	Short practical test (3) Quiz	Fourteenth week	1	1
14	Live drawings and homework	Weeks 6, 8, 9, 10, 11, 12 and 13	5.5	5.5
15	Final practical test	Final semester test	20	20
	Total	100	100%	100%
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. Karam Ali Younus ALtaee



Practical subject teachers: M.M. Muhammad Samir Idris



Chairman of scientific committee Prof.dr. Weam Yahya Rasheed



Head department of food science Assist. Prof.dr. Moyassar Mohammed Aziz

