

Course description form

1. : Course name Econometrics 2	
Econometrics 2	
2. : code Course Code	
MCNM492	
3. : Semester/Year	
2025\2024 fourth/ semester	
4. : Date this description was prepared	
2025/2/1	
5. : Available forms of attendance	
My presence+ online	
6. : (Number of study hours (total)/number of units (total)	
number of units ,45 : Theoretical hours: 30 hours / Practical hours: 3.5 units	
7. (Name of the course administrator (if more than one name is mentioned)	
Name : Dr.waleed ibahim sultan. waleedsultan502@uomosul.edu.iq	
Name : salah f.shaba: salahodesh@uomosul.edu.iq	
Name : Eman f. Mohammd . eman_faisal@uomosul.edu.iq	
8. objectives Course	
<p>: practical</p> <p>Enabling the student to understand and - understand the concepts related to econometrics, along with the extent to which the student applies econometrics methods and methods in the practical .field</p> <p>Enabling the student to know the solution to the - tests T, FR^2, and R^{-2}) the student's Depending on (practical experience, importance is not given to the . subject</p> <p>Enabling the student to solve mathematical - exercises for statistical tests</p> <p>g the student to solve the mathematical Enablin - exercises for standard tests and other tests that accompany them</p> <p>The student can identify the most important - standard problems and how to get rid of these four standard problems</p> <p>st important The student can learn about the mo - standard problems and how to get rid of these four standard problems and how to deal with each problem through detection methods and relying on the standard method to get rid of problems in a way that ensures the integrity of the variables and dealing with them through the consequences</p>	<p>:theoretical</p> <p>Enabling the student to understand and - understand what is related to econometrics student's awareness the And work to determine of the importance and role of econometrics in practical applications and economic research</p> <p>Enable the student to know multiple - regression</p> <p>Enabling the student to know the most - important economic and statistical tests</p> <p>student to know the most Enabling the - important statistical tests</p> <p>Enabling the student to know the most - important standard problems</p> <p>Enables the student to know the causes of - standard problems facing variables</p> <p>The student can learn the most important - etecting the four standard methods for d -problems (multiple linear correlation stationarity of variance -non autocorrelation) .(error problem -</p> <p>The student can know the economic effects - of each of the standard problems</p>

<p>.resulting from them</p> <p>Acquiring skills in dealing with the pillars of - -variables -econometrics (such as data forms), each in proportion to the -relationships .type of variable</p>	<p>ginary The student can identify ima - economic variables</p>
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9. Teaching and learning strategies

<p>The strategy</p>	<p>The origins and re, brainstorming, dialogue and discussion statement Interactive lectu concept of econometrics</p> <p>The relationship between Interactive lecture, brainstorming, dialogue and discussion econometrics, mathematics and statistics</p> <p>larifying the goals and pillars of econometrics Interactive lecture, brainstorming, c</p> <p>Interactive lecture and brainstorming Types of economic models</p> <p>Interactive lecture, brainstorming, dialogue and discussion, explaining the multiple linear regression model</p> <p>-ialogue and discussion of contrasts and co Interactive lecture brainstorming, d variations</p> <p>Interactive lecture, brainstorming, explaining the variance of the random ($\sigma^2 u_i$) variable</p> <p>for the significance of T test Interactive lecture, brainstorming, and creating a the parameters</p> <p>lecture, brainstorming, dialogue, and participation in estimating the Interactive (R^2) multiple determination coefficient</p> <p>Interactive lecture, brainstorming, dialogue, and participation in the corrected d adjusted and the correcte (R^2) adjusted coefficient of determination (R^2) coefficient of determination</p> <p>Interactive lecture, brainstorming, dialogue, and participation in the partial correlation coefficient</p> <p>Interactive lecture, brainstorming, dialogue and discussion, assignment of tasks .report (GLM) land general linear mode</p> <p>(F) Interactive lecture, brainstorming, dialogue and discussion, test</p> <p>Interactive lecture, brainstorming, dialogue and discussion, assigning tasks and reporting the multiple linear regression equation using the general linear model (rix methodmat)</p> <p>Interactive lecture and brainstorming of the four standard problems (multiple (error problem -stationarity of variance -non -autocorrelation -linear correlation</p> <p>Interactive lecture, brainstorming, dialogue and discussion of the ity problem multicollinear</p> <p>Interactive lecture, brainstorming, dialogue and discussion, assignment of tasks reporting of the problem-and self</p> <p>Interactive lecture, brainstorming, dialogue and discussion of the problem of</p>
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stationarity of variance-non

rainstorming, dialogue, and discussion on the problem Interactive lecture, b
of errors and formal variables



10 . Course structure

Evaluation method	Learning method	Name of the unit or topic	Required learning outcomes	hours	the week
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	Econometrics concept emergence of econometrics Objectives of econometrics	udent becomes familiar The stA I the concept of econometrics with the Explains to the studentB1 origins and concept of econometrics	2 Theore tical	1
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting ndAssigning tasks a	Mathematical application of inequalities	contrasts learnsC1	Practi3 cal	
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting asks andAssigning t	Multiple regression and its interpretations	Estimating equation for multiple B2 regression model	2 Theore tical	2
t examsShor Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	Mathematical application of covariances	How to analyze covariancesD1	Practi3 cal	
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	test stepst-	test- t Definition ofA2	2 Theore tical	3
Short exams Assignment of utyd discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	Testing the significance of explanatory variables	Types of hypothesesB3 Present the null and alternative C3 hypotheses	Practi3 cal	



Short exams Assignment of duty discussion	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	Quality of matchmaking	shows the multiple determination B4 R2 coefficient	2 Theore tical	4
Short exams Assignment of duty discussions	Auditory methods boardStyle of writing on the black Direct dialogue style reporting Assigning tasks and	Applications to mathematical problems of the coefficient of determination	The student learns mathematical C4 methods for calculating the corrected or adjusted coefficient of R-2 ,determination	Practi3 cal	
Short exams Assignment of duty discussions	Auditory methods ckboardStyle of writing on the bla Direct dialogue style reporting Assigning tasks and	GLM General Linear Model	The student estimates the partial B5 (r) correlation coefficient	2 Theore tical	5
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard dialogue style Direct reporting Assigning tasks and	Assumptions of the general linear model	the linear The student analyzesD2 model	Practi3 cal	
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style Assigning tasks	e linear modelSimpl	Explain to the student the B6 the coefficient relationship between and (R2) of determination Corrected coefficient of (R-2) determination	2 Theore tical	6
Short exams Assignment of duty discussions	Auditory methods of writing on the blackboard Style Direct dialogue style Assigning tasks	Multicollinearity model	How to calculate simple C5 regression equation	Practi3 cal	
Short exams Assignment of duty discussions	Auditory methods le of writing on the blackboardSty Direct dialogue style reporting Assigning tasks and	Reasons for the emergence of standard problems	Explains the concept to the B7 Standard problems student	2 Theore tical	7
Short exams Assignment of	Auditory methods kboardStyle of writing on the blac	Causes of standard problems	How to prove that the problem C6 occurred	Practi3 cal	



duty discussions	Direct dialogue style reporting Assigning tasks and				
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style Dir reporting Assigning tasks and	multicollinearity problem MC	Shows the student the B8 multicollinearity problem	2 Theoretical	8
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and Assi	MC	MC problem Prove that the C7 occurred MC the problem occurs How D3	Practical	
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	Perfect and imperfect linear correlation	Explains to the student the B9 implications of the multicollinearity problem	2 Theoretical	9
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	an MC Methods for detecting problem	Shows the student how to detect B10 the problem	Practical	
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style Assigning tasks	Kluber -Escape method	the The student learns about A3 Klein detection method	2 Theoretical	10
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style Assigning tasks	Mathematical applications of the multicollinearity problem	learns about processing methods A4 ways to mathematically Learns C8 get rid of the problem	Practical	
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	Reasons for the emergence of the ociationass-problem of self	The student becomes familiar A5 with the concept of the autocorrelation problem	2 Theoretical	11
Short exams Assignment of duty	Auditory methods Style of writing on the blackboard Direct dialogue style	for detecting the Methods autocorrelation problem	The student distinguishes the E2 implications of the autocorrelation problem	Practical	



discussions	reporting Assigning tasks and				
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard leDirect dialogue sty reporting Assigning tasks and	Detection methods	The student learns how to get rid A5 -Cochran oblem using theof the pr (Orcat method (conversion method How to identify the replay or C 9 repetition method general How to learn about the B11 least squares method	2 Theore tical	12
Short exams Assignment of duty discussions	Auditory methods ackboardStyle of writing on the bl Direct dialogue style reporting Assigning tasks and	test methodDW Watson-	The student distinguishes D4 between detection methods (von ratio Henshaw -Theile -Neumann (test	Practi3 cal	
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	cations of the problem of Impli stationarity of variance-non	the Explain to the studentB12 stationarity of -problem of non variance Forms and reasons for the C10 emergence of the problem	2 Theore tical	13
Short exams Assignment of tydu discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	-the problem of non Exercises on constancy of contrast	Compare and differentiate D5 ection methodsbetween det distinguishes between the E3 implications of a problem	Practi3 cal	
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	decreasing contrast -increasing -	Explains to the student the types B13 of contrast	2 Theore tical	14
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	vellum address the Exercises on problem of contrast inconsistency	The student analyzes detection D6 (Spearman test) methods	Practi3 cal	
Short exams Assignment of	Writing style on Auditory methods logue styleDirect dia the blackboard	Disposal methods	specifies the methods of B14 - detection for the student (Park	2 Theore	15



duty discussions	reporting Assigning tasks and		-Quandt) due to non -Coldfeld constancy of variance	tical
Short exams Assignment of duty discussions	Writing style on Auditory methods rect dialogue styleDi the blackboard reporting Assigning tasks and	Lag – variable Models	The student learns time lag B15 models fictitious and formal comparesD7 metaphors	Practi3 cal



Course evaluation -11				
Relative weight %	Class	Calendar a week -appointment	Calendar methods	T
5	5	15-1 My theory week	Final theoretical report +	1
10	5 5	Week 3	Quiz hort test 1S	2
15	10 5	Week 9	Midterm test Theoretical and practical	3
10	5 5	Week 12	Short test 2 Quiz	4
20	20	Practical exam week	Final practical test	5
40	40	A week of theoretical exam	Final theoretical test	
100	100		the total	

12-Learning and teaching resources -

. Saifu-Introduction to Econometrics: Dr. Walid Ismail Al-1
 Saifu and Dr. -Analytical Econometrics BIM Theory and Application Dr. Walid Ismail Al -2
 Ahmed Muhammad Mishal
 Damodar N.Gujarati (2004) Basic Econometric Tata Mc Graw -Hill Edition, 4th -3
 Edition, New Delhi

Theoretical teacher: Dr. Walid Ibrahim Sultan

Practical teacher: Eman F. Mohammad

and salah F. Shaba

gricultural Economics DepartmenHead of the A

,Chairman of the Scientific Committee

Dr. Zwald fathi abd

Dr. kays N. Ghazal