Course description form

1. : Course nameEconometrics2
Econometrics 2
2. :code Course Code
MCNM492
3. : Semester/Year
2024-fourth stage/2023/ semester
4. : Date this description was prepared
2024/2 /2
5. :Available forms of attendance
My presence
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
: Amiel Name : M.D. Waleed Ibrahim Sultan Alwaleedsultan502@uomosul.edu.iq : Yamil Al Eman Faisal Muhammad . M .M :Nameeman_faisal@uomosul.edu.iq : Name : M.M. Muhammad Hamid Ahmed Emailmohammedhamid91@uomosul.edu.iq

objectives Course .8

:theoretical	: practical
Enabling the student to understand and - to econometrics understand what is related the student's awareness And work to determine and role of econometrics in of the importance practical applications and economic research	Enabling the student to understand and - the concepts related to econometrics, understand the extent to which the student applies along with methods and methods in the practical econometrics .field
Enable the student to know multiple - regression	Enabling the student to know the solution to the - testsT, FR ^{2}, and R $^{-2}$) the student's on Depending (to the is not given practical experience, importance . subject
the most Enabling the student to know - important economic and statistical tests	
most Enabling the student to know the - important statistical tests	solve mathematical Enabling the student to - exercises for statistical tests
know the most Enabling the student to - important standard problems	Enabling the student to solve the mathematical - tests that other exercises for standard tests and accompany them
to know the causes of Enables the student - standard problems facing variables	The student can identify the most important - standard problems and how to get rid of these four standard problems
learn the most important The student can - andard methods for detecting the four st -problems (multiple linear correlation stationarity of variance -non -autocorrelation .(error problem -	ut the most important The student can learn abo - 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 ables and way that ensures the integrity of the vari dealing with them through the consequences
The student can know the economic effects - each of the standard problems of	
The student can identify imaginary -	

.resulting from them Acquiring skills in dealing with the pillars of - - variables -econometrics (such as data forms), each in proportion to the - relationships .type of variable	economic variables

9. strategies Teaching and learning

The strategy	The origins and Interactive lecture, brainstorming, dialogue and discussion statement concept of econometrics The relationship between discussion Interactive lecture, brainstorming, dialogue and econometrics, mathematics and statistics of econometrics pillars Interactive lecture, brainstorming, clarifying the goals and Types of economic models Interactive lecture and brainstorming ue and discussion, explaining the Interactive lecture, brainstorming, dialog multiple linear regression model -Interactive lecture brainstorming, dialogue and discussion of contrasts and co variations Interactive lecture, brainstorming, explaining the variance of the random (σ 2ui) variable for the significance of T test Interactive lecture, brainstorming, and creating a the parameters Interactive lecture, brainstorming, dialogue, and participation in estimating the (R2) multiple determination coefficient dialogue, and participation in the corrected ,Interactive lecture, brainstorming and the corrected adjusted (R-2) adjusted coefficient of determination .(R-2) coefficient of determination Interactive lecture, brainstorming, dialogue, and participation in the partial entcorrelation coeffici Interactive lecture, brainstorming, dialogue and discussion, assignment of tasks .report (GLM) and general linear model (F) Interactive lecture, brainstorming, dialogue and discussion, test n, assigning tasks and Interactive lecture, brainstorming, dialogue and discussio reporting the multiple linear regression equation using the general linear model (matrix method) Interactive lecture and brainstorming of the four standard problems (multiple (error problem -variance stationarity of-non -autocorrelation -linear correlation Interactive lecture, brainstorming, dialogue and discussion of the multicollinearity problem Interactive lecture, brainstorming, dialogue and discussion, assignment of tasks reporting of the problem-and self brainstorming, dialogue and discussion of the problem of ,Interactive lecture

	stationarity of variance-non Interactive lecture, brainstorming, dialogue, and discussion on the problem 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 econometrics of emergence Objectives of econometrics	The student becomes familiar A1 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 Assigning tasks and	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 Assigning tasks and	Multiple regression and its interpretations	Estimating equation for multiple B2 regression model	2 Theore tical	2
Short exams 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 duty 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 discussions	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 Style of writing on the blackboard 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 Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	GLM General Linear Model	The student estimates the partial B5 (r) coefficient correlation	2 Theore tical	5
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style 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	Simple linear model	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 Style of writing on the blackboard Direct dialogue style Assigning tasks	Multicollinearity model	How to calculate simple C5 regression equation	Practi3 cal	
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 standard problems	Explains the concept to the B7 Standard problems student	2 Theore tical	7
Short exams Assignment of	Auditory methods Style of writing on the blackboard	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 reporting Assigning tasks and	multicollinearity problemMC	Shows the student the B8 multicollinearity problem	2 Theore tical	8
Short exams Assignment of duty discussions	Auditory methods Style of writing on the blackboard Direct dialogue style reporting Assigning tasks and	MC	MC problem Prove that the C7 occurred MC the problem occurs HowD3	Practi3 cal	
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 Theore tical	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	Practi3 cal	
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 aboutA3 Klein detection method	2 Theore tical	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 methodsA4 ways to mathematically LearnsC8 get rid of the problem	Practi3 cal	
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 association-problem of self	The student becomes familiar A5 with the concept of the autocorrelation problem	2 Theore tical	11
Short exams Assignment of duty	Auditory methods Style of writing on the blackboard Direct dialogue style	Methods for detecting the autocorrelation problem	The student distinguishes the E2 implications of the autocorrelation problem	Practi3 cal	

discussions	reporting Assigning tasks and				
Short exams Assignment of duty discussions	Auditory methods iting on the blackboardStyle of wr Direct dialogue style reporting Assigning tasks and	Detection methods	The student learns how to get rid A5 -Cochran of the problem using the (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 Style of writing on the blackboard 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	Implications of the problem of 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 duty 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 between detection methods 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 Direct dialogue style the blackboard	Disposal methods	specifies the methods of B14 - detection for the student (Park	2 Theore	15

duty discussions	reporting Assigning tasks and		- non due to (Quandt -Coldfeld constancy of variance	tical	
Short exams Assignment of duty discussions	Writing style on Auditory methods Direct dialogue style 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 Short test 1	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 -

1- Saifu-Introduction to Econometrics: Dr. Walid Ismail Al-Saifu and Dr. -Analytical Econometrics BIM Theory and Application Dr. Walid Ismail Al -Ahmed Muhammad Mishal

3- Damodar N.Gujarati (2004) Basic Econometric Tata Mc Graw -Hill Edition, 4th Edition, New Delhi

practical subject ,Walid Ibrahim Sultan .Theoretical subject teacher: Dr M . Iman Faisal Muhammad .teacher: Eng millimeter . Mohamed Hamed Ahmed