

Ministry of Higher Education and Scientific research



Department of Statistics and informatics

College of Administration and Economics

Salahaddin University-Erbil

Subject: Econometrics

Cores Book – First Semester – fourth stage (4)

Lecturer's name: Dr. Paree khan Abdulla Omer

Academic Year: 2022-2023

Course Book

1. Course name	Econometrics
2. Lecturer in charge	Paree khan Abdulla Omer
3. Department/ College	Statistics and informatics / Administrations and Economics
4. Contact	e-mail: paree_darbandy@yahoo.co.uk Tel: 07504702219
5. Time (in hours) per week	Theory: 2 Practical: 0
6. Office hours	Sunday // 8:30–10:30 /10:30–12:30 / 12:30-2:30
7. Course code	
8. Teacher's academic profile	<p>I have earned a M.Sc. in (2006-2007) and Ph.D. in (2012-2013) of Statistics from Administrations and Economics at Salaheddin University in Erbil. I have been teaching in Statistics department at Sallahddin University since 2006-2007. I have taught Decision Theory in 2012-2013, Regression Analysis in 2013-2014, 2014-2015, 2018-2019 and econometrics in 2016-2017, 2017-2018, 2019-2020, 2020-2021 and 2021-2022.</p> <p>I am currently teaching Econometrics and doing researches as well. My main research areas lie in Statistics and spatial statistics, with particular emphasis on Regression and time series, factor analysis and spatial analysis.</p>
9. Keywords	The concept of Econometrics, Methodology of econometrics, Simple linear econometrics model, The General Linear econometrics model, Autocorrelation, Multicollinearity, Heteroscedasticity.
10. Course overview:	The general purpose of this course is to study the basic concepts of econometrics; this course includes methodological of econometrics and liner regression model (simple linear econometrics model, General linear econometrics model, R^2 and ANOVA table)
11. Course objective:	Econometrics is a set of models used to estimate the relationships among economics variables, using sample data to understand or construct the future by modelling and analysing the data and answer questions or to draw conclusions about a population. Hypothesis test allow us to use sample data to decide between two competing claims, called hypotheses,

<p>15. Student learning outcome: At the end of this course, students are expected to be confidence from analyzing the relationships between all factors that related together in the reality. They will be able to formulate the modeling the relation and distinguish the type of relation and analyzing with interpreting the consequences after that make decisions. The students should have the ability to work in both public and private sectors as having good skills in analyzing.</p>	
<p>16. Course Reading List and References: Basic econometrics, fourth edition, Damodar N. Gujarati, 2003. ▪ Liner Regression, K.F. Turkman, 1998 ▪ Magazines and review (internet): many of papers</p>	
<p>17. The Topics:</p>	<p>Lecturer's name</p>
<p>Chapter One // Week -1- The concept of Econometrics Week -2- The Objectives of Econometrics Week -3- Economic model Week -5- Methodology of econometrics Week -6- Examples Week -7- Econometrics and regression analysis Week -8- Simple linear econometrics model Week -9- Checking the assumptions graphically Week -10- Coefficient's derivation of Simple linear model using OLS Week -11- Statistical tests and coefficient of determination (R^2) with (ANOVA) table. Week -12- Standard errors Week -13- The properties of the least square estimators Week -14- The General Linear econometrics model Week -15- The t-test and the F- test</p>	<p>Dr. Paree khan A. Omer</p>
<p>18. Practical Topics (If there is any)</p>	
<p>In this section the lecturer shall write titles of all practical topics he/she is going to give during the term. This also includes a brief description of the objectives of each topic, date and time of the lecture</p>	
<p>19. Examinations: 1. Compositional: In this type of exam the questions usually starts with Explain how, What are the reasons for...?, Why...?, How....? With their typical answers Examples should be provided</p>	

2. True or false type of exams:

Are these sentences (True) or (False) and correct the false sentences.

1. In OLS $R^2 = r^2$ when an estimated intercept $\hat{\beta}_0$ none exist.
2. When all point y_i lie on the straight line \hat{y}_i , then $y_i \neq \hat{y}_i$.
3. SSR denoted the unexplained variation, SSE can be thought as the 'explained' variation, The SST represents the total variation of the dependent variable.
4. Children's age and the number of words in their vocabulary is the negative correlation.
5. Usually R^2 less than R^2 because MSE for the model in which the intercept exists less than MSE for the model that not content on the intercept.

3. Multiple choices:

In this type of exam there will be a number of phrases next or below a statement, students will match the correct phrase. Examples should be provided.

20. Extra notes:

Here the lecturer shall write any note or comment that is not covered in this template and he/she wishes to enrich the course book with his/her valuable remarks.

21. Peer review

This course book has to be reviewed and signed by a peer. The peer approves the contents of your course book by writing few sentences in this section.

(A peer is person who has enough knowledge about the subject you are teaching, he/she has to be a professor, assistant professor, a lecturer or an expert in the field of your subject).