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

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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	Theory: 2	
week	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	I have earned a M.Sc. in (2006-2007) and Ph.D. in (2012-2013) of	
profile	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, 2020-2021and 2021-2022.	
	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.	
9. Keywords	The concept of Econometrics, Methodology of econometrics,	
	Simple linear econometrics model, The General Linear	
	econometrics model, Autocorrelation, Multicollinearity,	
	Heteroscedasticity.	
10 C	,	

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, R² 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,

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about a population characteristic. Although confidence intervals and hypothesis tests are generally used for different purposes, they share a common goal of generalizing from a sample to a population.

12. Student's obligation

Students have the right to participate in course examinations and other assessed performances. Examination frauds and copying of assignments or material are not allowed. Students are anticipated to attend classes and to submit assignments on the due date. Students are also expected to participate in tutorials. Students have representatives in the groups they can come to meetings to show their support; they have the right to report incidents of discrimination.

13. Forms of teaching

the teacher uses different ways to reaching the main objectives and in order to take the advantage and try to use the theories and connecting them with reality in order to delivery information to the students easily (access to the scientific purpose of the article), using the following means: -

The display through the use of software (Power Point Presentation) where the offer includes the following aspects: -

- 1. The basic address and subsidiary subjects required.
- 2. The definitions and basic notes.
- 3. Shapes and graphs

14. Assessment scheme

Allocation of degree examinations as follows: -

1) 40-degree of yearly seek (20 per exam)

The first course: (15) degree to action examination

(5) degree to activity & conducting quiz.

The second course: (15) degree to action examination

(5) degree to activity & conducting quiz.

2) 60-degree final exam (first round or the second)

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.

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

17. The Topics:	Lecturer's name
Chapter One //	Dr. Paree khan A.
Week -1- The concept of Econometrics	Omer
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	
18. Practical Topics (If there is any)	
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	
10 Evaminations	

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

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 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).