COURSE OUTLINE

Course Code / Title : HE4503 Policy Analysis Using Stata

Pre-requisites : HE3003 Econometrics II

No. of AUs. : 4

Contact Hours : 52

Course Aims

This course introduces the popular statistical software Stata© which is widely used by academics, business, and government agencies. The course is a Four-hour seminar course and usually consists of a two-hour introduction of the statistical procedures followed by a two-hour tutorial session (hands-on session).

Intended Learning Outcomes (ILO)

1. Familiar themselves with different kinds of statistical analyses

2. Conduct basic statistical analyses using Stata

3. Conduct and interpret econometric analyses in Stata

4. Design applied economic studies to evaluate policy impacts

Course Content

The main topics covered are: Review of statistical analyses and basic econometric analyses, Introduction and getting familiar with Stata*, Basic programming techniques, Programming in Stata*, Good practice in data management, Data management in Stata*, Using graphics to learn about data, Graphical display of data using Stata*, Conducting linear regression analysis in Stata*, Introduction to simulation, Basic simulation and policy analysis practice, Potential issues in linear regression analysis, Alternative approaches to address the potential issues, Some extensions of the linear regression model, Stata* implementation, IV analysis using Stata*, Potential issues in linear regression analysis, Alternative approaches to address the potential issues, Some extensions of the linear regression model, Stata* implementation, IV analysis using Stata*

Course Assessment

Class Participation	: 20%
Assignment 1	: 30%
Assignment 2	: 30%
Quiz 1	: 10%
Quiz 2	: 10%

Total	**100%**

Reading and References

Microeconometrics using Stata, (2022) – [CT]
Volume 1: Cross-Sectional and Panel Regression Methods
Auditor: A. Colin Cameron and Pravin K. Trivedi

NOTE: The above listing comprises the foundational readings for the course and more up-to-date relevant readings will be provided when they become available.

Planned Weekly Schedule

Week	Topic	Course LO	Readings/ Activities
Week 1	Review of statistical analyses and basic econometric analyses and Introduction and getting familiar with Stata©	1,2,3,4	Lecture Notes/ Microeconometrics using Stata, (2022) – [CT]
Week 2	Basic programming techniques and Programming in Stata©	1,2,3,4	Lecture Notes/ Microeconometrics using Stata, (2022) – [CT]
Week 3	Good practice in data management and Data management in Stata©	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Week 4	Using graphics to learn about data and Graphical display of data using Stata©	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Week 5	Conducting linear regression analysis in Stata© (Part I)	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Week 6	Conducting linear regression analysis in Stata© (Part II)	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]

Week 7	Conducting linear regression analysis in Stata© (Part III)	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Recess Week			
Week 8	Introduction to simulation and Basic simulation and policy analysis practice (Part I)	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Week 9	Basic simulation and policy analysis practice (Part II)	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Week 10	Potential issues in linear regression analysis and Alternative approaches to address the potential issues	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Week 11	Some extensions of the linear regression model and Stata© implementation	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Week 12	IV analysis using Stata© (Part I)	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]
Week 13	IV analysis using Stata© (Part II) and Q&A session	1,2,3,4	Lecture notes/ Microeconometrics using Stata, (2022) – [CT]