University of Benha
Faculty of Commerce
English Section
Dept. of Economics

COURSE SYLLABUS

Economics ME326

Economic Applications Using Computer

Second Term 2018/2019

1. Instructor Contact Info.

Name: Dr. Walaa Wageh Diab
Office Hours: Thursday 11am to 1 pm.
Online Office Hours: Friday 5 am to 8 pm.
Class meets Monday 2pm to 3:30Pm & 5pm. to 6:30pm.
Email: Walaa.dyab@fcom.bu.edu.eg
Course website:
            Lecture slides and exercises accessible through My official page:
                              http://bu.edu.eg/staff/walaadyab4

2. Course Materials

A. (Text Book)

This course is a textbook-based. The primary text will be:

Diab, Walaa. (2019) " Introduction To Basic Econometrics And Computational Economics", Engineering house for print, Egypt.

This course provides a hands-on main Concepts and basics of Econometrics, and how it can be applied in the economic research according to the computational economics. Many examples will be practiced in class; therefore, you should make an effort to come to the lectures (in fact, attendance is strongly recommended). I teach largely from Power-Point presentations, which I make available to students through the link of this course at (http://bu.edu.eg/staff/walaadyab4). The lecture slides are my version of lecture notes. They tie together concepts from different readings and provide a solid framework for the lectures but are by no means a substitute for doing the readings and attending class.

A. **Web Pages & Other Materials**

- http://iiis.tsinghua.edu.cn/~eccs/
- http://www.eviews.com/home.html
- https://faculty.washington.edu/ezivot/econ424/424notes.htm
- https://nsf.gov/pubs/2011/nsf11584/nsf11584.htm
- https://sites.google.com/site/econometricsacademy/econometrics-software/introduction-to-spss
- https://www.ibm.com/analytics/spss-statistics-software
- https://www.r-project.org/
- https://www.stata.com/products/

B. **Other useful links**

- http://www.afriheritage.org/TTT/2%20Basic%20Econometrics%20-%20Gujarati%5B1%5D.pdf
- https://faculty.washington.edu/ezivot/econ424/descriptivestatistics.pdf
- https://s3-eu-west-1.amazonaws.com/s3-euw1-ap-pe-ws4-cws-documents.ri-prod/9781138859661/chapter_02_slides.pdf
- IMF economic concept explained: https://www.imf.org/external/pubs/ft/fandd/basics/pdf/Economic-concepts-explained.pdf

3. Course Description, Aims and Overview:

The course is designed to use Excel, and EViews software in practical applications for the main required steps before modeling any data of interest according to the methodology of Econometric. Thus, our main focus lies on applications of the descriptive statistics and visualizations of data using Excel and Eviews.

The course aims to provide quantitative/econometrics modeling skills typically/specifically preparing data for modeling. The course picks theoretical and practical background for econometrics/quantitative/predictive analysis. Implementations are done using Excel, and Eviews software. Observations, interpretations, predictions and conclusions are explained then and there on the examples as we proceed through the term. So, This course fills the gap between understanding the concepts and implementing them practically

4. Course Calendar:

At the end of this Syllabus is a Course Calendar. It outlines the topic for each class meeting and is subject to change at the discretion of the instructor and upon consideration of class dynamics.

5. Other Supplemental Readings:

For better understanding of the course material, you can read:

- Gujarati, D.N. (2003). Basic Econometrics, International Edition, 4th ed. McGraw-Hill Higher Education.
- gung, I. Gusti Ngurah (2011). Time Series Data Analysis Using EViews. John Wiley & Sons.
- Amman, H.M., D.A. Kendrick and J. Rust (eds), (1996), Handbook of Computational Economics, North-Holland, Amsterdam.

ogelvang, Ben (2005). Econometrics: Theory and Applications with EViews. Pearson Education.

6. Assessment:

Attendance/Participation: Participation in class will be rewarded with up to 5 points. If you attend class consistently and occasionally answer questions during class, you'll be fine.

Lateness and Courtesy: Please arrive on time to class and please turn off all cell phones.

Attendance is not mandatory for the course. However, mature behavior is a course is a requirement. Engaging in behavior that disturbs the class will result in a reduction in the course grade.

There are Four sets of requirements for this course:

ACTIVITIES	PERCENTAGES
In class participation	5%
Quizzes	5%
Mid- term exam	10%
Final exam	80%

7. Instructor Policies

(Honor Code): All work submitted for this course must be your own. Any evidence of cheating and/or plagiarism in any assignment or exam will be dealt with as specified by the Academic Integrity Policy. All students in violation of the honor code during an exam will receive an immediate grade of zero for that exam and the violation will be forwarded to the Honor Committee.

(Exam Policy)

The midterm and final exams cannot be made-up under any circumstance. If the midterm is missed due to a medical emergency, the final exam will be re-weighted. In the case of a medical emergency, the student must provide proof by the last scheduled lecture (i.e. not after the semester ends). Note that missing any exam due to non-emergency associated travel plans will render an exam score of zero.

Office Hours

I will hold office hours by appointment. Please e-mail me to schedule a time. I will also allocate Sunday and Wednesday mornings to answering e-mail questions about the course. If your question is urgent, please indicate this in the subject line and I will try to respond sooner.

Copyright Notice.

Students should assume that: the respective author copyrights all course material. The course instructor prohibits the reproduction of course material without consent. Violation of copyright is against the law and will be reported.

8. Course Calendar

Below is a tentative course calendar. It may change at discretion of lecturer and class dynamics.

PROJECTED TIMETABLE

Tentative Lecture Schedule and Readings (the week may change)

Part I:
A WINDOW INTO ECONOMETRICS

Monday 11/2 **Monday 18/2**	**CHAPTER 1** **Econometrics in a nutshell** 1.1 What Is Econometrics? 1.2 Econometrics and Mainstream economics 1.3 The Importance of Econometrics 1.4 Why Econometrics Is A Separate Branch Of Economics? 1.5 Limitations and criticisms ✦ **EVIEWS INTERFACE AND WORKFILE BASICS**

Monday 25/2
 	
Monday 4/3
	CHAPTER 2
	
	The Methodology Of Econometrics
	
	2.1 Why Do Research?
	2.2 Research Types
	  A. Basic Research B. Applied Research
	  C. Quantitative Research D. Qualitative Research
	2.3 Methods vs. Methodology
	2.4 The Methodology Of Econometrics: An Overview
	2.5 Steps in Empirical Economic Analysis
	
	✦ **GETTING DATA TO EVIEWS**

Monday 11/3	**CHAPTER 3** **Basic Concepts in Econometrics** **3.1** Economic Modeling 3.2 Classification Of Variables In Economic Models 3.3 Selected Basic Econometric Terms 3.4 Econometric notations

	⬇ **BASIC DATA HANDLING**

Monday
 	
18/3
	Chapter 4
	
	Economic Data: Sources, Types and Structure
	
	4.1 Sources Of Economic Data
	
	4.2 Types And Structures Of Economic Data
	
	     A. Time Series Data
	
	     B. Cross-Section Data
	
	     C. Pooled Data

Monday **25/3**	4.3 Data Accuracy 4.5 Economic Indicators ⬇ **EVIEWS DATABASE**
Monday **1/4**	**Mid Term Exam**
PART II: **Computational Economics and the Application of Econometrics**
Monday **8/4**	**Chapter5** **Introduction To Computational Economics** **5.1** The Concept Of Computational Economics 5.2 The Importance Of The Computer-Economic Interaction ⬇ **WORKING WITH DATA IN EVIEWS**
Monday **15/4**	**Chapter 6** **Software Packages For Economic Modeling**
Monday **22/4**	**Chapter 7** **Analyzing Data: Descriptive Statistics Using Excel and Eviews**

	7.1 Overview Of The Descriptive Statistics 7.2 Interpretation of Descriptive Statistics (How to read &report) **⬍ GROUPS IN EVIEWS**
Monday **29/4**	**Vacation of sham El-Nessim**
Monday **6/5**	7.4 Steps For Descriptive Statistics in Excel 7.5 Steps For Descriptive Statistics Using Eviews
Monday **13/5**	7.3 Data Visualization and It's Interpretation Data Visualization using Excel & Eviews