   
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](mailto:Walaa.dyab@fcom.bu.edu.eg)

* Course website:   
  Lecture slides and exercises accessible through My page:
  + 1. <http://bu.edu.eg/staff/walaadyab4>

1. Course Materials
2. (Text Book)

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

Diab. Walaa. (2019). “Introduction To Basic Econometrics And Computational Economics”.

This course provides a hands-on Concept and basics of econometrics. And how it can be applied in economic research using statistic packages according to the computational economics. More 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.

1. 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/>

1. 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>

1. Course Description, Aims and Overview:

The course is designed to use the EViews software in practical applications for econometric and statistical analysis. The main focus lies on applications of the descriptive statistics and visualizations of data using Excel and Eviews.

As mentioned in course objective, Eviews – Econometrics modelling course aims to provide quantitative/econometrics modelling skills typically/specifically in Finance sector. Quantitative methods and predictive modelling concepts could be extensively used in understanding the financial markets movements, and studying tests and effects. The course picks theoretical and practical datasets for econometrics/quantitative/predictive analysis. Implementations are done using Eviews software. Observations, interpretations, predictions and conclusions are explained then and there on the examples as we proceed through the training. The course also emphasizes on the regression models, and AIMS to also cover Auto-Correlation, Co-Integration and ARCH (Auto Regressive Conditional Heteroscedasticity) models

Griffiths/Hill/Lim (2008): "Using EViews for Principles of Econometrics", John Wiley and Sons (selected chapters).

Eviews and Its Application to Econometrics Modelling: This course aims to provide basic to intermediate skills on implementing Econometrics/Predictive modelling concepts using Eviews software. Whilst its important to develop understanding of econometrics/quantitative modelling concepts, its equally important to be able to implement it using suitable software packages. This course fills the gap between understanding the concepts and implementing them practically

Pre-requisites

• Econometricscombineseconomictheorywithstatistics to analyze and test economic relationships.

• Understandingthestatisticalpropertiesiscritically important for understanding why econometric techniques work in certain contexts and fail in others.

• However, basic statistics courses tend to cater many different disciplines

– Too little emphasis on some topics – Too much emphasis on others

Checklist of statistics topics

• Descriptivestatistics

• Randomvariables

• Probabilitydistributions

• Expected value and variance

• Sampling

• Estimation

• Statistical inference

1. 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.

1. Other Supplemental Readings:

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

* Howells, P and K. Bain. The Economics of Money, Banking and Finance: A European Text, 3rd ed. Prentice Hall, 2005.
* As a large component of this course is macro-based, you may also wish to read a macroeconomics textbook to supplement your understanding. Numerous recommended macroeconomics books are available, such as Froyen, Gordon or Blanchard.
* A considerable portion of the course will cover topics related to monetary economics. You may wish to read a textbook on monetary economics to improve your understanding of these topics like: Bain, K. and P. Howells.

1. 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. Texting during class is discouraged since it often distracts other students.

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

There are three sets of requirements for this course:

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

1. 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 Monday and Thursday 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.

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1. 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 #’s may change)

|  |  |
| --- | --- |
| Week 1 | CHAPTER 1 Why Study Money, Banking, and Financial Markets? |
| CHAPTER 3 in book 1 What Is Money?  CHAPTER 2 in book 2 |
| Week 3 | CHAPTER 4 Understanding Interest Rates |
| CHAPTER 5 The Behaviour of Interest Rates |
| PART Two: Monetary Theory | |
| Week 5, 7 | CHAPTER 21 The Demand for Money  Chapter 19 Quantity Theory, Inflation, and the Demand for Money |
| Week 9 | CHAPTER 22 The ISLM Model |
| CHAPTER 23 Monetary and Fiscal Policy in the ISLM Model . |
| Week 11 | CHAPTER 24 Aggregate Demand and Supply Analysis |
| Week 13 | CHAPTER 7 The Stock Market, the Theory of Rational Expectations, and the EfficientMarketHypothesis |
| Week 15 | CHAPTER 27 Rational Expectations: Implications for Policy |

COURSE OUTLINE





