

American University of Central Asia
Course Information
School of Entrepreneurship and Business Administration
Fall 2017

Course Title:	Econometrics
Course Code:	MBA - 534
Course Coordinator:	Kamila Kolpashnikova
Course Duration:	XXX
No. of Credit Units:	XXX
Class meeting:	Tuesdays 20:00 – 21:15
Mode:	Lecture/Seminar
Contact:	Kolpashnikova_k@auca.kg
Appointments/Hours	By appointment

1. Abstract:

Doing econometrics can be easy and fun. This course is designed for MBA students. You will learn to apply your new acquired knowledge in practice and learn more about how to use and interpret statistical data.

2. Course Aims:

Students will learn to analyze and interpret data using Stata (or R, by their choice on the first class). They will also learn the basics of writing up research results and of performing basic statistical analyses. The course will focus on ordinary least squares estimation with a short introduction to binary and multinomial logistic models. The techniques will be explained both conceptually and mathematically. However, this course will not be heavily mathematical, so don't be afraid of math!

3. Learning Outcomes:

Specifically,

- Students will review the foundations of quantitative analysis, principles of inferential statistics, hypothesis testing, and mathematics behind Ordinary Least Squares (OLS) regression
- Students will develop and improve their command of programming software (Stata or R)

- Students will challenge themselves to develop testable hypotheses, obtain and create necessary datasets, run appropriate analysis and test their hypotheses, and to interpret their results.

As a result of this course, students will produce (1) an abstract of their future research; (2) a research proposal that they may submit as a part of application to a graduate school; and (3) a research paper using datasets of their own or the American Time Use Survey.

4. Assessment Tasks/Activities

Homework (15%)

Students will be given homework and will be expected to submit it on time. Late submissions will not be accepted.

Class presentations of research proposals (10%)

Students will present their research proposals and submit them (no longer than 2 pages, single-spaces, Times New Roman, 12pt) no later than October 10 by 17:00. In their proposals, they will identify clearly their research question, its significance, position their study in the theoretical literature, elaborate the methods that they propose to reach their conclusion, and summarize the main expected results and potential contributions of the study. The presentations should be around 10 minutes long.

Midterm exam (20%)

The midterm exam will cover statistical concepts discussed in class, test students' understanding of data analysis and processing.

Presentations of individual research papers (15%)

Students will also present their final research papers. All presentations are expected to reflect students' understanding and skill in applying statistical methods. The papers should meet the requirements applicable to academic writing. The length of presentations will be around 10-15 minutes. Students should highlight the main hypotheses, elucidate the methods that they used for their projects, and outline the results and how they fit into the literature ('the bigger picture'). The deadlines for presentations and for submission of papers are indicated in the schedule below. Late papers will not be accepted.

Research papers (30%)

Students are required to submit their final projects no later the last day of class. Research papers must longer than 10 (ten) pages but within 20 (twenty) pages (double-spaced, 12pt, Times New Roman, 1-inch margins), excluding references, graphs, tables, and appendices.

The content must include the following:

- **Introduction:** describe your research problem and explain why it is important, what do you contribute to research area?
- **Literature review:** review at least three (3) sources (these MUST BE academic articles)

- Statement of **hypotheses**, explain the reason why you think these associations (in hypotheses) are expected
- **Data and Measures:** describe datasets you used, measures (a.k.a. your variables: dependent variable, independent variables, and control variables), and coding (how did you code the variables for the analysis)
- **Empirical results and discussion:** write up statistical and lay interpretation of your model output
- **Conclusions:** sum up, implications, and what future research would be necessary for this topic
- **Appendices:** your Stata .do and .dta files

5. Course Policies:

Course instructor reserves the right to modify any and all portions of this syllabus at any time during the period of the course. Any modifications will be communicated in writing to students.

6. Submission of Assignments:

Written assignments are to be completed in APA style Format in class on the date they are due. Late submission will account for 50% of achieved grade.

Assignments are to be submitted to google classroom page or via email to the instructor.

7. Academic Integrity

- I. The use of cell phones (talking, texting, etc.) during class is strictly prohibited. Students violating this policy will be given one (1) warning. A second violation of this policy will result in the student being counted absent for the class.*
- II. The use of any other electronic devices (SUCH AS LAPTOP, IPADS) during class for any purpose NOT related to the furtherance of the class objectives is strictly prohibited. Students violating this policy will be given one (1) warning. A second violation of this policy will result in the student being counted absent for the class.*
- III. Students are expected to follow the AUCA ACADEMIC HONESTY code. All types of plagiarism are strictly prohibited. If a student fails to observe this requirement, the instructor may assign an "F" for the work or an "F" for the whole class, depending on the type of assignment and relevant circumstances. Students are expected to read and follow the section on the Student Academic Dishonesty of the AUCA Code of Student Rights, Responsibilities and Conduct.*

- IV. *You are encouraged to study together and to discuss information and concepts covered in lecture and the sections with other students. You can give "consulting" help to or receive "consulting" help from such students. However, this permissible cooperation should never involve one student having possession of a copy of all or part of work done by someone else, in the form of an e-mail, an e-mail attachment file, a diskette, or a hard copy.*
- V. *I will take class attendance. Inconsistent attendance will be penalized.*
- VI. *Medical notes should be from AUCA medical office.*

8. GRADING CRITERIA

A 100-93%	B- 82-80%	D+ 69-67%
A- 92-90%	C+ 79-77%	D 66-61%
B+ 89-87%	C 76-73%	D- 62-60%
B 86-83%	C- 72-70%	Failing Grade: below 60%

9. Explanation of Grades Obtained

Homework	throughout the course	15%
Abstracts	week 4	10%
Presentation of research proposals	week 5	10%
Midterm exam	October 17	20%
Presentation of research papers	week 14	15%
Research papers	week 15	30%

- A** Student demonstrates exceptional understanding and able to critique existing literature and shows good abilities to derive policy implications; Performs well in every aspect of class participation and submits final paper of Journal quality.
- B** Ability to think conceptually and to perform in class participations, and in final paper. Student is able to form plausible arguments and provides reasonable conclusions.
- C** Marginal ability to analyze material presented in lectures and readings. While the student has attended class and involved in discussions, performance is merely class average.
- D** Limited ability to analyze material presented in lectures and readings. While the student has attended class and involved in discussions, performance has been below class average.

- F Poor learning or lack of effort, the student has failed to demonstrate even a minimal capacity to analyze concepts and theories. Misses most classes and performed very poorly in, or even failed to participate in class discussions. The final paper, if submitted, has been of a poor standard or plagiarized.

10. Tentative Course Schedule: *May change to accommodate guest presenters & student needs*

PLEASE CHANGE AND ADD ACCRODINGLY TO SUIT YOUR SUBJECT; IMPORTANTLY, BE CLEAR ON YOUR TARGETS SO AS TO ACCOMMODATE HOLIDAYS AND BREAKS;

Topics	Readings to be discussed	Homework Assignment	Other
Dates	Topics	Reading and homework assignment	
Week 1 September 5	Course description; introduction to Stata SARMS and pre-test		
Week 2 September 12	Types of variables, distributions; working with cleaning data in Stata (R)	Attitudes survey (SARMS) and pre-test DUE Ch 1. The Quest for Causality	
Week 3 September 19	Distributions, normal distribution (mean and SD); how to write abstracts	Ch. 2. Stats in the Wild: Good Data Practices	
Week 4 September 26	Writing research proposals and describing methods part of a proposal/paper. Time use datasets cleaning with Stata	Abstracts DUE September 26	
Week 5 October 3	OLS with Stata and interpretation; math of OLS		
Week 6 October 10	Continuing OLS with Stata; OLS interpretation	Research Proposals DUE October 10 Ch. 3. Quiz (10 min) in class	
Week 7 October 17	Midterm exam	Midterm exam October 17 Ch. 4 Hypothesis Testing	
Week 9 October 24 (PRESENTATIONS)	Presentations of research proposals Feedback – and working with the proposal	Lab DUE October 26 (write up of OLS)	
Week 10 October 31	Multiple regression models with Stata/ write-up	Quiz on Ch 5	
Week 11 November (MAKE UP CLASS FOR November 14)	Exercises using multiple regression analysis (Stata) / write-up. Interactions and categorical IVs with Stata/ write-up	Quiz on Ch 6	

Week 12 November 21	Exercises using multiple regression analysis (Stata) / write-up. Interactions and categorical IVs with Stata/ write-up	Quiz on Ch 7
Week 13 November 28	Introduction to logistic regression / interpretation (Stata).	Ch 12
Week 14 December 5	Presentations of the final paper.	Ch 8-9. SARMS and Post-test DUE
Week 15 December 12	Introduction to multinomial regression / interpretation (Stata). Introduction to time series and panel data	Projects DUE December 12

11: Readings

Bailey, Michael A. (2016). *Real Econometrics: The Right Tools to Answer Important Questions*. New York: Oxford University Press.

Recommended Readings:

Goldberger, Arthur S. (1991). *A Course in Econometrics*. Cambridge, MA: Harvard University Press.

Wooldridge, Jeffrey. (2009). *Introductory Econometrics. A Modern Approach*. 4th Edition. South-Western College Pub.