UNIVERSITATEA BABEȘ-BOLYAI
BABEȘ-BOLYAI TUDOMÁNYEGYETEM
BABEȘ-BOLYAI UNIVERSITÄT
BABEȘ-BOLYAI UNIVERSITY
TRADITIO ET EXCELLENTIA

FACULTATEA DE
BUSINESS
IN PARTNERSHIP
Facultatea de Business

Str. Horea nr.7
Cluj-Napoca, 400174
Tel.: 0264599170
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SYLLABUS
Academic year 2022-2023

1. Information regarding the programme

1.1. Higher education institution	Babeș-Bolyai University
1.2. Faculty	Business
1.3. Department	Business Administration
1.4. Field of study	Business Administration
1.5. Study cycle	Master
1.6. Study programme / Qualification	International Business Administration

2. Information regarding the course

2.1. Name of the course	Econometrics				
2.2. Code	IME0006				
2.3. Course coordinator	Cristian Chifu, PhD				
2.4. Seminar coordinator	Cristian Chifu, PhD				
2.5. Year of study I	2.6. Semester 2	2.7. Type of evaluation E	2.8. Type of course	compulsory	

3. Total estimated time (hours/semester of didactic activities)

3.1. Hours per week	4	Of which: 3.2. lecture	2	3.3 seminar/laboratory	2
3.4. Total hours in the curriculum	42	Of which: 3.5. lecture	28	3.6. seminar/laboratory	14

Time allotment:	ore
Learning using manual, course support, bibliography, course notes	28
Additional documentation (in libraries, on electronic platforms, field documentation)	28
Preparation for seminars/labs, homework, papers, portfolios and essays	28
Tutorship	2
Evaluations	4
Other activities: Final exam preparation	18
3.7. Total individual study hours	108
3.8. Total hours per semester	150
3.9. Number of ECTS credits	6

4. Prerequisites (if necessary)

4.1. curriculum	
4.2. competencies	

5. Conditions (if necessary)

5.1. for the course	classroom with computer and projector;
5.2. for the seminar /lab activities	classroom with computer and projector;

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6. Specific competencies acquired

Professional competencies	At the end of this course students must be able to: • use the econometrics principles and understand its principles as a quantitative analysis tool; • communicate in econometric "language" • make connections between the administrations of econometrics and other business disciplines;
Transversal competencies	• applying rigorous and efficient work rules, evidence of responsible attitudes and teaching science to optimally creative potential of their own specific situations with the principles and rules of professional ethics; • an efficient and effective organized team activities; effective use of information sources and communication resources and training assistance, both in Romanian and in a foreign language;

7. Objectives of the course (outcome of the acquired competencies)

7.1. General objective of the course	• Learning the econometrics principles and understanding its principles as a tool for quantitative analysis
7.2. Specific objective of the course	• the ability to use the statistical and econometrical language and acquire knowledge and skills in an area with a very large application at macro and micro level: econometrics; • develop skills of data analysis that describes an economic phenomenon; • development of communication skills in econometric language.

8. Content

8.1. Course	Teaching method	Remarks
Introduction in econometrics • History of Econometrics; • Methodology of Econometrics.	interactive discussion	1 course
A review of some statistical concepts • Basic information's (elements, population, sample, data, variables) • Working with samples • From sample to population (estimators, hypothesis testing)	interactive discussion	1 course
The linear regression model: two-variable model • Population regression function • Sample regression function • Estimation of parameters: Ordinary least squares • Hypothesis testing • Coefficient of correlation. Coefficient of determination • Estimation and Forecasting	interactive discussion	2 courses
Multiple regression • The three-variable linear regression model	interactive discussion	1 course

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• Estimation of parameters • Hypothesis testing in multiple regression • Adjusted R^2 • Estimation and Forecasting • Removing explanatory variables from the model • Adding explanatory variables to the model		
Functional forms of regression models • Log-linear model (multiplicative) • Semilog model (exponential) • Lin-log model (logarithmic X) • Reciprocal model • How to compare models • Multiple log-linear model • Restricted least-squares method • Polynomial model	interactive discussion	2 courses
Regression on dummy explanatory variables • ANOVA models • ANCOVA models	interactive discussion	1 course
Regrssion Analysis in Practice • Multicollinearity • Heteroscedasticity • Autocolrelation	interactive discussion	3 courses
Dynamic economic models • Autoregresive models • Distributed lag models	interactive discussion	1 course
Project	interactive discussion	1 course
Revision	interactive discussion	1 course
Bibliography	1. Gujarati, D., Porter, D.C., Basic Econometrics. New York: McGraw-Hill, 2009 2. Ruud, P.A., Classical Econometric Theory, Oxford University Press, 2000. 3. Wooldridge, J.M., Introductory Econometrics, South-Western College Publishing, 2000. 4. Reader_Econometrics_2020 (by e-mail)	

8.2. Seminar	Teaching method	Remarks
Introduction in econometrics • History of Econometrics; • Methodology of Econometrics.	interactive discussion	1 seminar
A review of some statistical concepts • Basic informations (elements, population, sample, data, variables) • Working with samples • From sample to population (estimators, hypothesis testing)	interactive discussion	1 seminar

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The linear regression model: two-variable model • Population regression function • Sample regression function • Estimation of parameters: Ordinary least squares • Hypothesis testing • Coefficient of correlation. Coefficient of determination • Estimation and Forecasting	interactive discussion	2 seminars
Multiple regression • The three-variable linear regression model • Estimation of parameters • Hypothesis testing in multiple regression • Adjusted R^2 • Estimation and Forecasting • Removing explanatory variables from the mdel • Adding explanatory variables to the model	interactive discussion	1 seminar
Functional forms of regression models • Log-linear model (multiplicative) • Semilog model (exponential) • Lin-log model (logarithmic X) • Reciprocal model • How to compare models • Multiple log-linear model • Restricted least-squares method • Polynomial model	interactive discussion	2 seminars
Regression on dummy explanatory variables • ANOVA models • ANCOVA models	interactive discussion	1 seminar
Regrssion Analysis in Practice • Multicollinearity • Heteroscedasticity • Autocolrelation	interactive discussion	4 seminars
Dynamic economic models • Autoregresive models • Distributed lag models	interactive discussion	1 seminar
Revision	interactive discussion	1 seminar
Bibliography	1. Gujarati, D., Porter, D.C., Basic Econometrics. New York: McGraw-Hill, 2009 2. Ruud, P.A., Classical Econometric Theory, Oxford University Press, 2000. 3. Wooldridge, J.M., Introductory Econometrics, South-Western College Publishing**,** 2000**.** 4. Reader_Econometrics_2020 (by e-mail)	

9. Corroborating the content of the course with the expectations of the epistemic community, professional associations and representative employers within the field of the program

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- The course content is correspondence with what is done in other universities in the country and abroad.
- To adapt to the market demands of the contents meetings were held with representatives of the business community.

10. Evaluation
- **The same evaluation criteria hold for all exams sessions;**
- **In order to be able to cumulate the points obtained during the semester, it is mandatory to obtain minimum 5 (five) in the final exam.**

Type of activity	10.1 Evaluation criteria	10.2 Evaluation method	10.3 Pondere din nota finală
10.4. Course	• correct logical and coherent application of the concepts learned • logical and accurate explanation and interpretation of the results;	final exam	50%
10.5. Seminar/lab activities	• the ability to apply concepts learned in practice • correct logical and coherent application of the concepts learned • economic explanation of the results; • interest in the individual preparation throughout the whole semester	applicative activities (projects, essays, reports, etc.) the active participation in seminars and solving tasks during the semester	30% 20%
10.6. Minimum performance standards			
➢ Knowledge of the fundamental concepts and their applicate examples; ➢ The economic interpretation of the results.			

Date	Signature of course coordinator	Signature of seminar coordinator
02.05.2022	**Ioan Cristian CHIFU, PhD**	**Ioan Cristian CHIFU, PhD**

Date of approval	Signature of the Head of department
20.05.2022	**Ioan Cristian CHIFU, PhD**