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

FACULTATEA DE BUSINESS IN PARTNERSHIP
Facultatea de Business

Str. Horea nr.7
Cluj-Napoca, 400174
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SYLLABUS
Academic year 2024-2025

1. Information regarding the program

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 program / Qualification	Business Administration in Hospitality and International Tourism

2. Information regarding the course

2.1. Name of the course	Forecasting in Tourism						
2.2. Code	IME0035						
2.3. Course coordinator	Professor Cristian Chifu, PhD						
2.4. Seminar coordinator	Professor Cristian Chifu, PhD						
2.5. Year of study	1	2.6. Semester	II	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	3	Of which: 3.2. lecture	2	3.3 seminar/laboratory	1
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:					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	C5 drawing up various reports/ studies useful for the running of a hospitality/ tourism unit and the provision of consultancy in the field
Transversal competencies	CT1 use of professional ethics standards and values specific to the field of hospitality and tourism

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
1. Introductory course – research methods in tourism	interactive discussion, problematization	1 course
2. Data analysis in tourism and hospitality • The nature of data in tourism and hospitality Estimators • Hypothesis testing • Comparison of samples	interactive discussion	1 course
3. Time series analysis • Component factors of time series • Analysis of the evolution of a time series • Smoothing methods – moving average method, exponential smoothing	interactive discussion	1 course
4. The linear regression model: two-variable model • Population regression function • Sample regression function • Estimation of parameters: The method of ordinary least squares • Hypothesis testing • Coefficient of correlation. Coefficient of determination • Forecasting	interactive discussion	1 course

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• Considerations on the ordinary least squares method		
5. Multiple linear regression • The three-variable linear regression model • Estimation of parameters • Hypothesis testing in multiple regression • Coefficient of multiple correlation. Coefficient of determination • Removing explanatory variables from the model • Adding explanatory variables to the model • Forecasting	interactive discussion	1 course
6. Other types of regression • Models that reduce to the simple linear model • Choosing the best model • Models reduced to multiple linear model • Least squares method with restrictions	interactive discussion	1 course
7. Least-Squares Trend Fitting and Forecasting • The Linear Trend Model • The Quadric Trend Model • The exponential Trend Model • Model Selection • The principle of parsimony	interactive discussion	1 course
8. Time series forecasting of seasonal data • Least square forecasting with monthly or quarterly data	interactive discussion	1 course
9. Regression on dummy explanatory variables • ANOVA models • ANCOVA models	interactive discussion	1 course
10. Logit and probit models	interactive discussion	1 course
11. Dynamic economic models • Autoregressive models • Distributed lag models	interactive discussion	1 course
12. Autocorrelation • The nature of autocorrelation • Consequences of autocorrelation • Detection of autocorrelation • Remedial measures	interactive discussion	1 course
13. Models with simultaneous equations • Estimating models with simultaneous equations	interactive discussion	1 course

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• The problem of identification		
14. Review and Project Presentation	interactive discussion	1course

Bibliography	1. Bereson, M.L., Levine, D.M., Krehbiel, T.C., Basic Business Statistics, Pearson, Prentice Hall, NJ, 2009. 2. Gujarati, D., Porter, D.C., Basic Econometrics. New York: McGraw-Hill, 2009 3. Ruud, P.A., Classical Econometric Theory, Oxford University Press, 2000. 4. Wooldridge, J.M., Introductory Econometrics, South-Western College Publishing, 2000. 5. Reader_Forecasting_2024_2025 (Course's Teams class)

8.2. Seminar	Teaching method	Remarks
1. Introductory course – research methods in tourism	interactive discussion, problematization	1 course
2. Data analysis in tourism and hospitality • The nature of data in tourism and hospitality Estimators • Hypothesis testing • Comparison of samples	interactive discussion	1 course
3. Time series analysis • Component factors of time series • Analysis of the evolution of a time series • Smoothing methods – moving average method, exponential smoothing	interactive discussion	1 course
4. The linear regression model: two-variable model • Population regression function • Sample regression function • Estimation of parameters: The method of ordinary least squares • Hypothesis testing • Coefficient of correlation. Coefficient of determination • Forecasting • Considerations on the ordinary least squares method	interactive discussion	1 course
5. Multiple linear regression • The three-variable linear regression model • Estimation of parameters • Hypothesis testing in multiple regression • Coefficient of multiple correlation. Coefficient of determination • Removing explanatory variables from the model	interactive discussion	1 course

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• Adding explanatory variables to the model • Forecasting		
6. Other types of regression • Models that reduce to the simple linear model • Choosing the best model • Models reduced to multiple linear model • Least squares method with restrictions	interactive discussion	1 course
7. Least-Squares Trend Fitting and Forecasting • The Linear Trend Model • The Quadric Trend Model • The exponential Trend Model • Model Selection • The principle of parsimony	interactive discussion	1 course
8. Time series forecasting of seasonal data • Least square forecasting with monthly or quarterly data	interactive discussion	1 course
9. Regression on dummy explanatory variables • ANOVA models • ANCOVA models	interactive discussion	1 course
10. Logit and probit models	interactive discussion	1 course
11. Dynamic economic models • Autoregressive models • Distributed lag models	interactive discussion	1 course
12. Autocorrelation • The nature of autocorrelation • Consequences of autocorrelation • Detection of autocorrelation • Remedial measures	interactive discussion	1 course
13. Models with simultaneous equations • Estimating models with simultaneous equations • The problem of identification	interactive discussion	1 course
14. Review and Project Presentation	interactive discussion	1course

Bibliography	1. Bereson, M.L., Levine, D.M., Krehbiel, T.C., Basic Business Statistics, Pearson, Prentice Hall, NJ, 2009. 2. Gujarati, D., Porter, D.C., Basic Econometrics. New York: McGraw-Hill, 2009 3. Ruud, P.A., Classical Econometric Theory, Oxford University Press, 2000. 4. Wooldridge, J.M., Introductory Econometrics, South-Western College Publishing, 2000. 5. Reader_Forecasting_2024_2025 (Course's Teams class)

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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

- The course content is in 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 Weight in the final grade
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
02.04.2024	Ioan Cristian CHIFU, PhD	Ioan Cristian CHIFU, PhD

Date of approval	Signature of the Head of department
17.04.2024	Ioan Cristian CHIFU, PhD