



SYLLABUS

Academic year 2022-2023

1. Information regarding the programme

1.1. Higher education institution	Babeş-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	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	C	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;



6. Specific competencies acquired

Professional competencies	<p>At the end of this course students must be able to:</p> <ul style="list-style-type: none"> • use the econometrics principles and understand its principles as a quantitative analysis tool; • communicate in econometric “language” • to forecast values for hotel activity indicators such as the demand;
Transversal competencies	<ul style="list-style-type: none"> • 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	<ul style="list-style-type: none"> • Learning the econometrics principles and understanding its principles as a tool for quantitative analysis
7.2. Specific objective of the course	<ul style="list-style-type: none"> • 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 econometric. The methodology of econometrics	interactive discussion	1 course
A short review of some statistical concepts <ul style="list-style-type: none"> • Basic information’s (elements, population, sample, data, variables) • Working with samples • From sample to population (estimators, hypothesis testing) 	interactive discussion	1 course
Time series analysis <ul style="list-style-type: none"> • Component factors of time series • Smoothing an annual time series (moving averages method, exponential smoothing) 	interactive discussion	1 course
The linear regression model: two-variable model <ul style="list-style-type: none"> • Population regression function • Sample regression function • Estimation of parameters: The method of ordinary least squares • Hypothesis testing 	interactive discussion	1 course



<ul style="list-style-type: none"> • Coefficient of correlation. Coefficient of determination • Forecasting • Considerations on the ordinary least squares method 		
Multiple regression <ul style="list-style-type: none"> • 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
Functional forms of regression models <ul style="list-style-type: none"> • Log-linear model (multiplicative) • Semilog model (exponential) • Lin-log model (logarithmic X) • Reciprocal model • Multiple log-linear model • Polynomial model 	interactive discussion	2 courses
Least-Squares Trend Fitting and Forecasting <ul style="list-style-type: none"> • The Linear Trend Model • The Quadric Trend Model • The exponential Trend Model • Model Selection Using First, Second and Percentage Difference 	interactive discussion	1 course
Time series forecasting of seasonal data <ul style="list-style-type: none"> • Least square forecasting with monthly or quarterly data 	interactive discussion	1 course
Regression on dummy explanatory variables <ul style="list-style-type: none"> • ANOVA models • ANCOVA models 	interactive discussion	1 course
Autocorrelation <ul style="list-style-type: none"> • The nature of autocorrelation • Consequences of autocorrelation • Detection of autocorrelation • Remedial measures 	interactive discussion	1 course
Dynamic economic models <ul style="list-style-type: none"> • Autoregressive models • Distributed lag models 	interactive discussion	1 course
Revision	interactive discussion	1 course



Project Presentation	interactive discussion	1 course
Bibliography	<ol style="list-style-type: none"> 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_2017 (by e-mail) 	

8.2. Seminar	Teaching method	Remarks
Introduction in econometric. The methodology of econometrics	interactive discussion	1 seminar
A short review of some statistical concepts <ul style="list-style-type: none"> • Basic information's (elements, population, sample, data, variables) • Working with samples From sample to population (estimators, hypothesis testing)	interactive discussion	1 seminar
Time series analysis <ul style="list-style-type: none"> • Component factors of time series • Smoothing an annual time series (moving averages method, exponential smoothing) 	interactive discussion	1 seminar
The linear regression model: two-variable model <ul style="list-style-type: none"> • 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	2 seminar
Multiple regression <ul style="list-style-type: none"> • 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 seminar



Functional forms of regression models <ul style="list-style-type: none"> • Log-linear model (multiplicative) • Semilog model (exponential) • Lin-log model (logarithmic X) • Reciprocal model • Multiple log-linear model • Polynomial model 	interactive discussion	2 seminars
Least-Squares Trend Fitting and Forecasting <ul style="list-style-type: none"> • The Linear Trend Model • The Quadric Trend Model • The exponential Trend Model • Model Selection Using First, Second and Percentage Difference 	interactive discussion	1 seminar
Time-Series Forecasting of Seasonal Data <ul style="list-style-type: none"> • Least Square Forecasting with Monthly or Quarterly Data 	interactive discussion	1 seminar
Regression on dummy explanatory variables <ul style="list-style-type: none"> • ANOVA models • ANCOVA models 	interactive discussion	1 seminar
Autocorrelation <ul style="list-style-type: none"> • The nature of autocorelation • Consequences of autocorelation • Detection of autocorelation • Remedial measures 	interactive discussion	1 seminar
Dynamic economic models <ul style="list-style-type: none"> • Autoregressive models • Distributed lag models 	interactive discussion	1 seminar
Revision	interactive discussion	1 seminar
Bibliography	<ol style="list-style-type: none"> 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_2017 (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

- 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 Pondere din nota finală
10.4. Course	<ul style="list-style-type: none">• 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	<ul style="list-style-type: none">• 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	<p>applicative activities (projects, essays, reports, etc.)</p> <p>the active participation in seminars and solving tasks during the semester</p>	<p>30%</p> <p>20%</p>
10.6. Minimum performance standards			
<ul style="list-style-type: none">➤ 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

22.05.2022

Ioan Cristian CHIFU, PhD