COURSE OUTLINE

1. Information about the program

1.1 Higher education institution	**“Alexandru Ioan Cuza” University of Iaşi**
1.2 Faculty	**Faculty of Economics and Business Administration**
1.4 Department	**Management, Marketing and Business Administration**
1.5 Field of study	**Business Administration**
1.6 Cycle of study	**bachelor**
1.6 Study program / Qualification	**Business Administration**

2. Information about the course

2.1 Course title			**Econometrics**				
2.2 Course coordinator			PROF.DR. DĂNUŢ JEMNA				
2.3 Seminar coordinator			PROF.DR. DĂNUŢ JEMNA				
2.4 Year of study	**2**	**2.5** Semester	**3**	**2.6** Type of evaluation*	**MT**	**2.7** Course status**	**C**

* *MT-MID-TERM, O-ORAL EXAM, E-EXAM, M-MIXED; ** C-compulsory/O-optional/E-elective*

3. Estimated time allocation (hours per semester and teaching activities)

3.1 Number of hours per week	**4**	out of which: **3.2** course	**2**	**3.3** seminar / laboratory	**2**
3.4 Total number of hours per semester	**56**	out of which: **3.5** course	**28**	**3.6** seminar / laboratory	**28**

Time allocation	h
Study based on course book, course materials, bibliography and other	**25**
Supplementary study in the library, on electronic platforms and on the field	**10**
Preparing seminars/laboratories, assignments, papers, portfolios and essays	**25**
Tutorship	**5**
Examination	**4**
Other activities	

3.7 Total hours of individual study	**69**
3.8 Total hours per semester	**125**
3.9 Number of credits	**5**

4. Prerequisites (if applicable)

4.1 Referring to curriculum	**Mathematics, Statistics, Economics**
4.2 Referring to competences	

5. Conditions (if applicable)

5.1 For the course	Attendance at classes is recommended.
5.2 For the seminar / laboratory	Attendance at seminaries is mandatory at least 75% of the total

6. Specific competences accumulated

Professional competencies	C1. Collection, processing and analysis of information on the external environment interaction-enterprise / organization (2 credits) C4. Assistance in human resource management (2 credits)
Transversal competencies	CT3. Identify training opportunities and efficient use of resources and learning techniques for their own development (1 credits)

7. Course objectives (based on specific competencies accumulated)

7.1 General objective	To provide the student the knowledge and skills necessary for the treatment of economic data to assess the relationships between phenomena and to build models that explain the dependence of economic phenomena.
7.2 Specific objectives	After successfully finalizing this course, students will be able to: ▪ Explain the nature of the relationship between economic phenomena using econometric models ▪ Describe the economic phenomena analyzed with quantitative methods ▪ Utilize econometric method on real economic data using SPSS ▪ Analyze the results of econometric modeling and solve real problems with these results ▪ Utilize estimated econometric models to estimate various parameters or to calculate estimated values for concrete situations

8. Content

8.1	**Course**	**Teaching methods**	**Observations** (time and bibliography)
1.	Conceptual and methodological elements	Interactive course, heuristic conversation, problem solving method	4 hours DG(1)
2.	Simple linear regression models	Interactive course, heuristic conversation, problem solving method	6 hours DG(1-5)
3.	Multiple linear regression models	Interactive course, heuristic conversation, problem solving method	6 hours DG(1-5)
4.	Nonlinear models	Interactive course, heuristic conversation, problem solving method	4 hours DG(6)
5.	Testing regression model classical assumptions	Interactive course, heuristic conversation, problem solving method	8 hours DG(10-12)

Bibliography

Compulsory reading

- Gujarati, D.N. – Basic Econometrics, 4-th Edition, McGraw-Hill, 2004 (DG)
- Stowell, S. – Using R for Statistics, Apress, 2014 (S)

Optional reading

- Dougherty, C. - Introduction to Econometrics, Oxford, 2001 (D)
- Greene, W.H. – Econometric Analysis, 4-th ed.,Prentice Hall, 2000 (G)
- Maddala, G.S. – Introduction to Econometrics, Macmillan, 1992 (M
- J.H. Stock, M.W. Watson – Introduction to Econometrics, Pearson International Edition, 2007 (SW)

8.2	**Seminar / Laboratory**	**Teaching methods**	**Observations** (time and bibliography)
1.	Review of Probabilistic distributions and Inferential statistics. Examples in R	Interactive teaching methods, case study method	4 hours DG(1-2), S(1,7)
2.	Economic theory examples that use econometric models	Interactive teaching methods, case study method	2 hours DG (1-2)
3.	Evaluating project working progress	Interactive teaching methods, case study method	2 hours
4.	Estimation of a simple linear regression model using R	Interactive teaching methods, case study method	4 hours DG (2-3), S(11)
5.	Estimation of a multiple linear regression model using R	Interactive teaching methods, case study method	4 hours DG (4-5), S(11)
6.	Estimation of a nonlinear regression model using R	Interactive teaching methods, case study method	4 hours DG (6), S(11)
7.	Evaluating project working progress	Interactive teaching methods, case study method	2 hour
8.	Testing regression model classical assumptions using R	Interactive teaching methods, case study method	4 hours DG (10-12)

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9. Bridging course content with the expectations of the community, professional associations and representative employers in the field of the program

On an annual basis, the course content is discussed with the representatives of the business environment, who hire or could hire graduates from this program, while students are required to provide feedback (on-line, anonymous) after each semester about the course structure, teaching methods, as well as strengths / weaknesses (after the final evaluation).

10. Evaluation

Type of activity	**10.1 Evaluation criteria**	**10.2 Evaluation methods**	**10.3 Allocation to the final grade (%)**
10.4 Course	Theoretical and applied knowledge	2 tests	50
10.5 Seminar/ Laboratory	Applied / practical knowledge	Reading and discussing case studies, homework Project	50 (20+30)
10.6 Minimal performance standard			
Obtaining 5 points (out of 10) both for the project and each partial assesment tests. The minimum grade 5 for the final score.			
100% Evaluation along the semester			

Date
09 september 2021

Course coordinator
Prof. Danut Jemna, PhD

Seminar coordinator
Prof. Danut Jemna, PhD

Date of approval in the department
25 september 2021

Head of department
Assoc. Prof. Andrei Nestian, PhD