

COURSE SYLLABUS

1. Information about the study programme

1.1 Institution of higher education	West University of Timisoara
1.2 Faculty / Department	Faculty of Economics and Business Administration
1.3 Department	Doctoral School of Economics and Business Administration
1.4 Area of study	Economics and Business Administration
1.5 Level of studies	Doctoral
1.6 Study program	Finance, Economics, Management, Marketing, Accounting

2. Information about the topic

2.1 Course title	Research methods						
2.2 Course instructor	Prof. Gratiela Georgiana NOJA, PhD. habil.						
2.3 Seminars and case studies activities instructor	-						
2.4 Year of study	1	2.5 Semester	1	2.6 Type of assessment		2.7 Type of subject matter	

3. Total estimated time (hours of teaching per semester)

3.1 Number of hours per week	2	3.2 course	2	3.3 workshops	-
3.4 Total hours in the curriculum	24	3.5 course	24	3.6 workshops	-
Distribution of time:					hours
Individual study based on handbooks, notes, bibliography					62
Additional documentation, electronic data base / on site study					44
Preparing seminars / laboratories, homework, essays, research reports					100
Tutoring					20
Examinations					10
Other activities					-
3.7 Total hours of individual study	226				
3.8 Total hours per semester	250				
3.9 Number of ECTS	10				

4. Prerequisites (where applicable)

4.1 of curriculum	
4.2 of competences	

5. Requirements (where applicable)

5.1 of the course	<ul style="list-style-type: none"> Face to face and online teaching, Moodle platform (https://elearning.e-uvv.ro), Drive and Google Hangouts Meet Technical equipment (laptop/PC, Internet, econometric packages/ software)
5.2 to lead seminar / laboratory	<ul style="list-style-type: none"> -

6. Specific skills acquired

Professional competences	Ability to identify and correctly apply specific research methods according to a growing range of research endeavours in economics and business administration
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Transversal competences	
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7. Course objectives (based on the grid of the skills acquired)

7.1 The overall objective of the topic	<ul style="list-style-type: none"> The course sets the principles, general framework and fundamental credentials of specific research methods in economics and business administration, with a keen focus on quantitative research methods
7.2 The specific objectives	<ul style="list-style-type: none"> Modelling economic and managerial specific/tailored settings Apply particular algorithms in approaching current economic and business issues Compare and contrast quantitative and qualitative research methods Implement specific quantitative research methods Apply sampling methods, measurement scales and instruments

8. Contents

8.1 Course	Teaching methods	Comments
Research methods (introductory issues, fundamental credentials)	Interactive lecture.	S1: face to face 2h
Epistemology, opinions, judgement, argumentation, logical thinking	Interactive lecture	S2: face to face 2h
Research design and operationalization of concepts	Interactive lecture	S3: face to face 2h
Measurement, sample selection (randomizing and sampling), and causal modeling. Working with data (specific datasets)	Interactive lecture	S4: face to face 2h
Quantitative and qualitative research methods	Interactive lecture	S5: online 2h
Fixed effects models / Least Squares Dummy Variable Model (LSDV); Random effects models / Error Component Model (ECM); Distributed lags and Dynamic models	Interactive lecture, practical applications and examples in R and Stata	S6: online 2h
Structural Equation Modelling - SEM	Interactive lecture, practical applications and examples in Stata	S7-S8: online 4h
Network analysis - Gaussian and Mixed Graphical Models – GGMs and MGMs	Interactive lecture, practical applications and examples in R	S9-S10: online 4h
Cluster analysis (Ward method inset for hierarchical clusters)	Interactive lecture, practical applications and examples in Stata	S11-S12: online 4h

Bibliography

- Baltagi B. (2009), *Econometric Analysis of Panel Data*, 2nd edition, Wiley-Blackwell Publishing, ISBN 978-0471-499374.
- Baum F. Christopher (2001a), „Residual diagnostics for cross-section time series regression models”, *The Stata Journal*, Vol. 1, No. 1, pp. 101-104.
- Baum F. Christopher (2001b), „An Introduction to Modern Econometrics Using Stata”, *Stata Press*, ISBN 1-59718-013-0, pp. 1-34.
- Iphofen R. (2020), *Handbook of Research Ethics and Scientific Integrity*, Springer Publishing, ISBN 978-3-030-16758-5.
- Machado C., Davim C., Paulo J. (2020), *Research Methodology in Management and Industrial Engineering*, Springer Publishing, 978-3-030-40896-1.
- Mukherjee S.P., Bikas K Sinha, Asis Kumar Chattopadhyay (2018), *Statistical methods in social science research*, Singapore: Springer Publishing, pp. 1-98, <https://www.worldcat.org/title/statistical-methods-in-social-science-research/oclc/1056176857/viewport> (E-book, Internet resource).

7. Schram A., Ule A. (2019), *Handbook of Research Methods and Applications in Experimental Economics*, Edward Elgar Publishing, eISBN: 978-1-78811-056-3.
8. Tsounis N., Aspasia V. (2018), *Advances in Time Series Data Methods in Applied Economic Research: International Conference on Applied Economics (ICOAE) 2018*, Cham Springer International Publishing, Cham Springer 2018, pp. 1-111, <https://www.worldcat.org/title/advances-in-time-series-data-methods-in-applied-economic-research-international-conference-on-applied-economics-icoae-2018/oclc/1079846449/viewport> (*E-book, Internet resource*).

9. Corroboration of the course contents with the epistemic expectations of the community representative, professional associations and representative employers of the programme itself.

- The topic meets the expectations of PhD students and provides the necessary skills for a comprehensive research endeavour in economics and business administration aligned with the needs of and opportunities provided by the labour market

10. Evaluation

Type of activity	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of the final mark
10.4 Course	Recognizing and correctly applying specific research methods associated with a growing range of research endeavors in economics and business administration	Oral evaluation/ presentation (research project)	100%
10.5 Workshop	-	-	-

Date of submission
2 .0 .202

Signature titular of the course,
Prof. Gratiela Georgiana NOJA, PhD. habil.

Date of approval in department

Head of the Department