

Syllabus

1. Programme information

1.1. Institution	THE BUCHAREST UNIVERSITY OF ECONOMIC STUDIES
1.2. Faculty	Business Administration in Foreign Languages
1.3. Departments	Department of Economic Informatics and Cybernetics
1.4. Field of study	Business Administration
1.5. Cycle of studies	Master Studies
1.6. Education type	Full-time
1.7. Study programme	Digital business and innovation
1.8. Language of study	English
1.9. Academic year	2023-2024

2. Information on the discipline

2.1. Name	Computer systems for business intelligence								
2.2. Code	23.0295IF1.1-0005								
2.3. Year of study	1	2.4. Semester	1	2.5. Type of assessment	Exam	2.6. Status of the discipline	O	2.7. Number of ECTS credits	6
2.8. Leaders	C(C)	conf.univ.dr. VESPAN Dragos Marcel				dragos.vespan@ie.ase.ro			
	S(S)	conf.univ.dr. VESPAN Dragos Marcel				dragos.vespan@ie.ase.ro			

3. Estimated Total Time

3.1. Number of weeks	14.00
3.2. Number of hours per week	4.00 of which
	C(C) 2.00
	S(S) 2.00
3.3. Total hours from curriculum	56.00 of which
	C(C) 28.00
	S(S) 28.00
3.4. Total hours of study per semester (ECTS*25)	150.00
3.5. Total hours of individual study	94.00
<i>Distribution of time for individual study</i>	
Study by the textbook, lecture notes, bibliography and student's own notes	31.00
Additional documentation in the library, on specialized online platforms and in the field	40.00
Preparation of seminars, labs, assignments, portfolios and essays	20.00
Tutorials	1.00
Examinations	2.00
Other activities	

4. Prerequisites

4.1. of curriculum	
4.2. of competences	

5. Conditions

for the C(C)	Lectures are conducted in room with computers and Internet access
for the S(S)	Seminars are conducted in room with computers and Internet access

6. Acquired specific competences

PREFESSIONAL	C4	
PREFESSIONAL	C6	

7. Objectives of the discipline

7.1. General objective	The course aims to develop among students the knowledge and skills for transforming, exploring and analyzing data and for creating simple and interactive visual reports.
7.2. Specific objectives	At the end of this course students will be able to identify ways to transform, explore and analyze data and create simple and interactive visual reports using SAS Viya.

8. Contents

8.1. C(C)		Teaching/Work methods	Recommendations for students
1	Introduction to SAS Visual Analytics	Interactive presentation and exemplification on a computer connected to beamer	
2	Data transformation with SAS Data Studio	Interactive presentation and exemplification on a computer connected to beamer	
3	Exploring data through charts and graphs	Interactive presentation and exemplification on a computer connected to beamer	
4	Data analysis with SAS Visual Analytics	Interactive presentation and exemplification on a computer connected to beamer	
5	Creating simple reports	Interactive presentation and exemplification on a computer connected to beamer	
6	Creating interactive reports	Interactive presentation and exemplification on a computer connected to beamer	
7	Using display rules	Interactive presentation and exemplification on a computer connected to beamer	
8	Role of information technology and its financial impact	Interactive presentation and exemplification on a computer connected to beamer	
9	E-commerce	Interactive presentation and exemplification on a computer connected to beamer	
10	Artificial intelligence	Interactive presentation and exemplification on a computer connected to beamer	

Bibliography

- Dragos Vespan, Course support, 2023, online.ase.ro
- Nicole Ball, SAS Visual Analytics 1 for SAS Viya:Basics, 2020
- John D. Kelleher, Brian Mac Namee and Aoife D’Arcy, Fundamentals of Machine Learning for Predictive Data Analytics, 2020

8.2. S(S)		Teaching/Work methods	Recommendations for students
1	Data visualization tools and their different use	Interactive presentation and exemplification on a computer connected to beamer	
2	Critical thinking and chart interpretation	Interactive presentation and exemplification on a computer connected to beamer	
3	Business context and purpose	Interactive presentation and exemplification on a computer connected to beamer	
4	Data exploration	Interactive presentation and exemplification on a computer connected to beamer	
5	Data preparation	Interactive presentation and exemplification on a computer connected to beamer	
6	Data analysis for business purpose	Interactive presentation and exemplification on a computer connected to beamer	
7	Data visualization	Interactive presentation and exemplification on a computer connected to beamer	
8	Data insights	Interactive presentation and exemplification on a computer connected to beamer	
9	Business decision making	Interactive presentation and exemplification on a computer connected to beamer	
<p><i>Bibliography</i></p> <ul style="list-style-type: none"> - Dragos Vespan, Course support, 2021, online.ase.ro - Nicole Ball, SAS Visual Analytics 1 for SAS Viya:Basics, 2020 			

9. Corroboration of the contents of the discipline with the expectations of the representatives of the epistemic community, of the professional associations and representative employers in the field associated with the programme

The content of the discipline was correlated with the requirements of the business environment on the occasion of the various professional meetings and debates in which the course holder took part.

10. Assessment

Type of activity	Assessment criteria	Assessment methods	Percentage in the final grade
10.1. S(S)	Active participation in laboratory classes, completing assignments and individual/team project	The answers given during the hours, solving of the given assignments and conformity of the project with project requirements are evaluated.	40.00

10.2. Final assessment	Scores are given for the correct answers and the interpretation of practical problems is analyzed according to predefined scales.	Written exam with MCQ and practical problems to be solved and interpreted.	60.00
10.3. Modality of grading	Whole notes 1-10		
10.4. Minimum standard of performance	Knowledge of techniques and methods for transforming, exploring and analyzing data and creating simple and interactive visual reports.		

Date of listing,
04/26/2024

Signature of the discipline leaders,

Date of approval in the
department

Signature of the Department Director,