Syllabus

1. Program information

1.1. Institution	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 studies	Master Studies
1.6. Education type	Full-time
1.7. Program study	Digital Business and Innovation
1.8. Language study	English
1.9. Academic year	2020-2021

2. Course information

2.1. Name	**IT Systems for Virtual Enterprises**							
2.2. Code								
2.3. Years of studies	1	2.4. Semester	1	2.5. Assessment type	**Exam**	2.6. Course type	**O (Mandatory)**	2.7. No. of ECTS **6**
2.8. Leaders	Conf. Univ. Dr. Dragoș Vespan – dragos.vespan@ie.ase.ro							

3. Total estimated 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		94.00	
Time distribution for individual study			
Study the textbook, course support, bibliography and notes		35.00	
Further reading in the library, on the online platforms and field		35.00	
Preparing seminars, labs, homework, portfolios and essays		18.00	
Tutoring		2.00	
Examinations		3.00	
Other activities		1.00	

4. Prerequisites

4.1. About curriculum	Technologies for E-Business General Informatics
4.2. About skills	Students must have general knowledge on Web and HTML

5. Requirements

for C(C)	The lectures will be sustained in room equipped with teaching multimedia and connected to internet.
for S(S)	The lectures will be sustained in room equipped with teaching multimedia and connected to internet.

6. Skills covered

Professionals	C4	Development of competences for the evaluation and usage of computer applications and technologies
	C6	Development of innovation skills and innovative use of information technology in the application of specific methods, techniques and tools for business administration

7. Course objective

7.1. General objective	The course aims to develop students' knowledge and skills for extracting and processing information necessary for companies in virtual environment
7.2. Specific objectives	At the end of this course, students will be prepared to use tools and to create small software applications to find and retrieve information from the virtual environment

8. Course contents

8.1. C(C)		Teaching methods	Advices
1	Information in Knowledge Society	Lectures, practical examples, case studies	
2	Data types and structures	Lectures, practical examples, case studies	
3	Data automation	Lectures, practical examples, case studies	
4	DOM architecture	Lectures, practical examples, case studies	
5	HTML content parsing	Lectures, practical examples, case studies	
6	Simulating human navigation behavior on the Web	Lectures, practical examples, case studies	
7	Networks and sockets	Lectures, practical examples, case studies	
8	Web Services – part I	Lectures, practical examples, case studies	
9	Web Services – part II	Lectures, practical examples, case studies	
10	API Protocols – part I	Lectures, practical examples, case studies	
11	API Protocols – part II	Lectures, practical examples, case studies	
12	API keys and authentication	Lectures, practical examples, case studies	

13	Information extraction using WEB API – part I	Lectures, practical examples, case studies	
14	Information extraction using WEB API – part II	Lectures, practical examples, case studies	

Bibliography:

Web 2.0-Based E-Learning : Applying Social Informatics for Tertiary Teaching
Lee, Mark J. W.; McLoughlin, Catherine IGI Global 2010
ISBN: ISBN number:9781605662947, ISBN number:9781605662954

No Code Required : Giving Users Tools to Transform the Web
Cypher, Allen; Dontcheva, Mira;and more Elsevier Science & Technology 2010
ISBN: ISBN number:9780123815415, ISBN number:9780123815422

Measure What Matters : Online Tools for Understanding Customers, Social Media, Engagement, and Key Relationships
Delahaye Paine, Katie; Delahaye Paine, Katie John Wiley & Sons, Incorporated 2011
ISBN: ISBN number:9780470920107, ISBN number:9781118016305

API Design for C++
Reddy, Martin Elsevier Science & Technology 2011
ISBN: ISBN number:9780123850034, ISBN number:9780123850041

HTML5 : Designing Rich Internet Applications
David, Matthew Taylor & Francis Group 2013
ISBN: ISBN number:9780240813288, ISBN number:9780240813295

https://www.w3.org/

8.2. S(S)		Teaching methods	Advices
1	Introductory seminar	Presentation of subjects approached at the seminar and discussion on project requirements.	
2	JSON content parsing	Exemplification on computers, practical exercises	
3	XML content parsing	Exemplification on computers, practical exercises	
4	HTML content parsing – part I	Exemplification on computers, practical exercises	
5	HTML content parsing – part II	Exemplification on computers, practical exercises	

6	HTML content parsing – part III	Exemplification on computers, practical exercises	
7	Using GET calls – part I	Exemplification on computers, practical exercises	
8	Using GET calls – part II	Exemplification on computers, practical exercises	
9	Using POST calls – part I	Exemplification on computers, practical exercises	
10	Using POST calls – part II	Exemplification on computers, practical exercises	
11	Using APIs for data extraction - part I	Exemplification on computers, practical exercises	
12	Using APIs for data extraction - part II	Exemplification on computers, practical exercises	
13	Using APIs for data extraction - part III	Exemplification on computers, practical exercises	
14	Presentation of individual/group projects	Conclusions of seminar activities during the semester. Communicating individual student scores Explaining scores (if requested)	

Bibliography:
Handbook of Open Source Tools
Koranne, Sandeep Springer 2010
ISBN: ISBN number:9781489991492, ISBN number:9781441977199

No Code Required : Giving Users Tools to Transform the Web
Cypher, Allen; Dontcheva, Mira;and more Elsevier Science & Technology 2010
ISBN: ISBN number:9780123815415, ISBN number:9780123815422

API Design for C++
Reddy, Martin Elsevier Science & Technology 2011
ISBN: ISBN number:9780123850034, ISBN number:978012385004

9. Course contents corroboration with the demands of epistemic community representatives, professional associations and representative employers

The course content was correlated with local business requirements and International during various professional meetings and debates where the Lecturer took part Lecturer.

10. Assessment

Activity	Assessment criteria	Assessment methods	Percentage in the final grade
10.1. S(S)	Progressive assessment	Active participation (10), simulations and a test	40.00
10.2. Final assessment	Summative assessment	Exam	60.00
10.3. Grading scale	Whole notes 1-10		
10.4. Minimum performance standard	Obtaining minimum 50 points		

Competition date,   Instructors,