SYLLABUS

Fundamentals of Entrepreneurship

University year 2025-2026

1. Information regarding the programme

1.1. Higher education institution	Babeş-Bolyai University of Cluj-Napoca
1.2. Faculty	Faculty of Mathematics and Computer Science
1.3. Department	Computer Science Department
1.4. Field of study	Computer Science
1.5. Study cycle	Master
1.6. Study programme/Qualification	Computer Science
1.7. Form of education	

2. Information regarding the discipline

2.1. Name of the discipline	**Fundamentals of Entrepreneurship**		Discipline code	**FDAU0001**
2.2. Course coordinator		Lect. Manuela Petrescu		
2.3. Seminar coordinator		Lect. Manuela Petrescu		

2.4. Year of study	1	2.5. Semester	1	2.6. Type of evaluation	V	2.7. Discipline regime	F

3. Total estimated time (hours/semester of didactic activities)

3.1. Hours per week	**2**	of which: 3.2 course	**2**	3.3 seminar/laboratory/project	**0**
3.4. Total hours in the curriculum	28	of which: 3.5 course	28	3.6 seminar/laboratory/project	**0**

Time allotment for individual study (ID) and self-study activities (SA)	hours
Learning using manual, course support, bibliography, course notes (SA)	12
Additional documentation (in libraries, on electronic platforms, field documentation)	20
Preparation for seminars/labs, homework, papers, portfolios and essays	10
Tutorship	5
Evaluations	
Other activities:	
3.7. Total individual study hours	**47**
3.8. Total hours per semester	**75**
3.9. Number of ECTS credits	**3**

4. Prerequisites (if necessary)

4.1. curriculum	- none
4.2. competencies	- none

5. Conditions (if necessary)

5.1. for the course	use of an online educational platform (Microsoft Teams)
5.2. for the seminar /lab activities	- none

6.1. Specific competencies acquired [1]

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[1] One can choose either competences or learning outcomes, or both. If only one option is chosen, the row related to the other option will be deleted, and the kept one will be numbered 6.

Professional/essential competencies	• demonstrate advanced skills to analysis, design, and construction of software systems, using a wide range of hardware / software platforms, programming languages and environments, and modeling, verification and validation tools;
Transversal competencies	• systematic use of computer science knowledge to model and interpret new situations, within application contexts larger than the known ones; • demonstrate advanced modeling skills for economic, industrial, scientific phenomena and processes, by using fundamental mathematical, statistical, and computer science knowledge.

6.2. Learning outcomes

Knowledge	The student knows the basic entrepreneurial concepts
Skills	The student is able to create a business plan, knows the steps in managing a business.
Responsibility and autonomy:	The student has the ability to work independently to obtain ...

7. Objectives of the discipline (outcome of the acquired competencies)

7.1 General objective of the discipline	• The course will introduce students to basic entrepreneurial, marketing and economical concepts, in order to discover and develop their entrepreneurial skills.
7.2 Specific objective of the discipline	• Students will learn about the entrepreneurial process and how to manage it. • Students will be able to identify a potentially viable idea and to elaborate a business plan.

8. Content

8.1 Course	Teaching methods	Remarks
Innovation and entrepreneurship: main definitions and interdependencies.	Description, dialogue, debate, case studies	

Idea, unique selling proposition, validation. Turn a problem into an opportunity. Assignment 1: create teams, find an idea and try to apply the theoretical part.	Description, dialogue, debate, case studies	
Marketing (1): Who are my potential customers and what do they want? Who are my potential competitors and how can I outcompete them?	Description, dialogue, debate, case studies	
Marketing (2): Create a marketing strategy. Assignment 2: Find your customers, create your marketing strategy.	Description, dialogue, debate, case studies	
Team and leadership. How to build a team? Roles in a team.	Description, dialogue, debate, case studies	
How to write a business plan? Budget income expenditure, and amortization. Assignment 3: Business plan	Description, dialogue, debate, case studies	
Initial financing opportunities. Cooperations, ecosystem and intrapreneurship.	Description, dialogue, debate, case studies	
Public speaking: body language, pitch, persuasion techniques.	Description, dialogue, debate, case studies	
Digital transformation and innovative thinking.	Description, dialogue, debate, case studies	
Preparing to launch (regulations).	Description, dialogue, debate, case studies	
Assignment 4: Public speaking, project presentation.	Description, dialogue, debate, case studies	
Trends and regulations considering social responsibility	Description, dialogue, debate, case studies	
Summary.	Description, dialogue, debate, case studies	
Q/A session	Description, dialogue, debate, case studies	

Bibliography
Gwartney, James. D., Stroup, Richard L., Lee, Dwight R., (2005), Common Sense Economics: What Everyone Should Know about Wealth and Prosperity,
Macmillan. Sartorelli, Deirdre (2017), Startup Smart: A handbook for entrepreneurs, published by Bureau of International Information Programs, United States Department of State.
 Reis, Eric. "The lean startup." New York: Crown Business 27 (2011)
. Duening, Thomas N., Robert A. Hisrich, and Michael A. Lechter. Technology entrepreneurship: Taking innovation to the marketplace. Academic Press, 2020.

8.2 Seminar / laboratory	Teaching methods	Remarks

Bibliography

9. Corroborating the content of the discipline with the expectations of the epistemic community, professional associations and representative employers within the field of the program

- Entrepreneurship has the ability to improve standards of living and create wealth, not only for the entrepreneurs but also for related businesses. Entrepreneurs drive change with innovation, as new products enable new markets to be developed and promote economic growth. Most of the entrepreneurial achievements are found in IT sector, so students in IT should acquire basic entrepreneurial knowledge in order to be able to successfully pursuite an entrepreneurial carrier. Last but not least, the core values of entrepreneurship (innovation, creativity, independence, determination etc.) are promoted by IT companies, so this course is also suitable for students who are not considering building their own startup.

10. Evaluation

Activity type	10.1 Evaluation criteria	10.2 Evaluation methods	10.3 Percentage of final grade
10.4 Course	Each of the assignments will be graded. Assignment 4 will be graded by both the TA and the other students.	Assignments 1-3: written form Assignment 4: oral examination	Assignments 1-3 will be graded with 20%, assignment 4 will be graded with 40%
10.5 Seminar/laboratory			
10.6 Minimum standard of performance			
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11. Labels ODD (Sustainable Development Goals)[2]

Not applicable.

Date:
...

Signature of course coordinator

Signature of seminar coordinator

Date of approval:
...

Signature of the head of department

Assoc.prof.phd. Adrian STERCA

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[2] Keep only the labels that, according to the *Procedure for applying ODD labels in the academic process*, suit the discipline and delete the others, including the general one for *Sustainable Development* – if not applicable. If no label describes the discipline, delete them all and write „*Not applicable.*".