

Teaching guide

IDENTIFICATION DETAILS

Degree:	Diploma in entrepreneurship and Innovation Projects Management (UFV-Awarded title associated to Biomedicine)
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Faculty/School:	Experimental Science
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Course:	FOUNDING TECHNOLOGY-BASED COMPANIES (II)
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Type:	Compulsory Internal	ECTS credits:	4
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Year:	3	Code:	21215
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Teaching period:	Fifth semester
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Teaching type:	Classroom-based
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Language:	English
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Total number of student study hours:	100
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Teaching staff	E-mail
Florence d'Emmerez de Charmoy	florence.demmerez@ufv.es

SUBJECT DESCRIPTION

This course is based in the Lean Launch Pad methodology, developed at Stanford University, U.C. Berkeley Haas Business School, Columbia University and the National Science Foundation (NSF). It is a hands-on program that immerses student teams are creating a technology-based startup by testing their business model hypotheses outside the classroom. Inside the classroom, it deliberately trades off lecture time for student/teaching team interaction. The course uses the Lean Startup process, with focus on Customer Development and the Business Model Canvas to collapse the infinite possibilities of a startup into a solvable problem. What this class does not include is execution of the business model. In this course, implementation is all about discovery outside of the classroom. Once discovery has resulted in a high degree of confidence that a viable business model exists, it is time to create an execution plan.

This class uses experiential learning as the paradigm for engaging the participants in discovery and hypotheses

testing of their business models. From the first day we meet, the teams get out of the classroom and learn by doing.

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This course will use the Problem-based learning (PBL) methodology, as well as the Team Based Learning (TBL). PBL is a student-centered approach in which students learn about a subject by working in groups to solve an open-ended problem. This problem is what drives the motivation and the learning. TBL is an approach that allows for the application of learned knowledge while enhancing problem-solving skills within a group context through multiple self-assessments and revisions.

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GOAL

The main objectives of this course are:

1. Apply tools for the design of business models and value propositions
2. Identification of hypothesis as a driver of business creation.
3. Carrying out problem interviews to validate the link between the problem and the solution.
4. Learn to design experiments in the contexts of Lean Startup to validate the initial and most critical hypotheses of the business model.
5. Build the Minimum Viable Product (MVP) or prototype of your project / startup using the techniques and tools seen in the workshops of previous year.
6. Handle simple metrics analysis tools for the results of the experiments performed.
7. Apply the knowledge validated in the pivoting or iteration of the business models of the project / startup and the solution.

The specific objectives are:

1. See validation processes, jobs-to-be-done methodology.
2. Learn about the Lean Launch Pad methodology
3. Understand deeply the BMC and validate the most critical hypothesis with potential clients, stakeholders, scientific experts.
4. Come up with lessons learned from market and clients' investigations
5. Pivot hypothesis when proved wrong after clients' validations
6. Learn to create a prototype
7. Learn how to present in class the experimentations outcomes and lessons learned in their final pitch deck
8. Learn how to pitch your business project (pitch deck).
9. Get to know the financing methods and investments rounds of start ups.

10. They will understand the difficulties of entrepreneurship in the health sector and how to improve the odds.
11. They will learn how to structure a pitch deck and gain presentations skills in public.

PRIOR KNOWLEDGE

- Founding Technology Based Companies I
- A high proficiency level in English is recommended, as well as a clear teamwork attitude from all enrolled students.
- Fluent use of Microsoft Office applications (Word, Excel, PPT) is also recommended.

COURSE SYLLABUS

The course will be distributed in three parts, the design of the business model, the validation of the model and the communication / selling phase.

1. Theory:

- Validation process and Jobs-to-be-done.
- What is the Lean Launch Pad methodology and how does it work.
- Balanced score card.
- Concepts of profitability, liquidity and viability.
- Risk analysis and contingency plan
- Metrics and basic financials for start ups (3 financial statements: P&L, Balanced Sheet, Cash flow statement).
- Legal status of start ups.
- Start ups capital funding process and investors ecosystem
- 4p's & Marketing basic concepts
- SWOT analysis
- Survival problems and how to avoid them in entrepreneurship projects in healthcare

2. Practice:

- Value Proposition
- Customer Segments
- Distribution Channels
- Customer Relationships (Get/Keep/Grow)
- Revenue Streams
- Partners & alliances
- Resources, Activities and Costs
- Prototyping
- Validation with potential clients, experts and potential stakeholders

3. Pitch deck:

- What is a pitch deck and how to make one
- Prepare your pitch deck and power point presentation
- Presentation of each team's project (10 minutes speech + possible Q&A).

EDUCATION ACTIVITIES

The most effective way to learn innovation methodologies and entrepreneurship is by the experience itself, the

learning by doing. Therefore, during the workshops and sessions, a purely practical approach will be maintained, where each concept and tool will be practiced in groups and on your project / startup.

Students should go out to the “street”, interview real clients, teachers, experts and they should run experiments and measure their assumptions about the business model in the market and look for facts in a methodical way.

In class, 30% of the time will be spent on the theoretical approach of the methodologies, tools and cases. A remaining 70% to perform practices on the project / startup itself. Students will work in their group and the teacher will mentorized the project.

The teacher will use innovative teaching methodologies like learning via projects, flipped classrooms, workshops, collaborative discussions, co-evaluation. The student must learn in an autonomous way and be part of their training. Therefore, we remind the student that this course involves an autonomous work of 60 hours during which at home the student will be in charge of reading the materials, listening to the videos lifted by the teacher in their CANVAS as autonomous tasks. This autonomous work as mentioned, can be doing exercise, reading complementary materials, working with their project with teammates, validating their hypothesis with experts and teachers etc.

DISTRIBUTION OF WORK TIME

CLASSROOM-BASED ACTIVITY	INDEPENDENT STUDY/OUT-OF-CLASSROOM ACTIVITY
40 hours	60 hours
<ul style="list-style-type: none"> Class lectures 14hGroup exercises 25hGroup presentations 1h 40h 	<ul style="list-style-type: none"> Home material study and complementary proposed home reading articles. 10hTeamwork developing activities for their project (interviews, meetings etc). 50h 60h

SKILLS

- Use state of the art methods & tools to generate innovation in a person-oriented manner in any organization.
- Design innovative, scalable and profit-driven entrepreneurial projects.
- Critical mindset, experimentation and problem-solving skills.
- Develop Entrepreneurial mind-set based on fact-finding and oral communication and presentation skills.

SPECIFIC LEARNING RESULTS

- Student is able to use and experience a methodology for *scalable startups* students can use for the rest of their careers, both as a startup enterprise or as a new business within an existing organization.
- Student has learned how to fail quickly and to learn from those experiments
- Student learn how to develop a scientific approach to the validation of business hypothesis.
- Student understands the risk and uncertainty of new business proposals

Student manage to develop effective business communication skills

- Student learn how estimate sales, create a P&L and find possible sources of investors for their initial investment.

LEARNING APPRAISAL SYSTEM

ORDINARY CALL

- 1.- Class attendance & participation **(10%)**. Individual evaluation based upon student's presence and collaborative team behavior. Minimum grade to approve this task is 5
- 2.- Exam Theory test with multiple answers **(40%)** Minimum grade to approve this task is 5.
- 3.- A final presentation in front of the jury to present the Pitch Deck of their business idea and project **(50%)**. Minimum grade to approve this task is 5.

EXTRAORDINARY CALL

- 1- The attendance mark achieved in ordinary will be respected for the extraordinary call. If a student does not achieve the minimum of 5 out of 10, he will have to visualize theory videos created by the teacher and make a summary of the material watched. **(10%)**.
 - 2- If any student does not achieve the minimum grade (5), he will have to take another theory multiple answer exam in his extraordinary call. **(40%)**
 - 3.- If a student is not present in the final exam presenting the project with his/her team, the student will have to record a 5-minute video explaining the part of the project that has been assigned to develop in his group and lift the video in the virtual class **(50%)**.
- Plagiarism behaviors, as well as the use of illegitimate means in evaluation tests, will be sanctioned in accordance with the provisions of the Evaluation Regulations and the Coexistence Regulations of the university.

BIBLIOGRAPHY AND OTHER RESOURCES

Basic

Steve Blank and Bob Dorf, 2012 The Step-by-Step Guide for Building a Great Company

Alexander Osterwalder, Yves Pigneur, 2010 Business Model Generation : A Handbook for Visionaries, Game Changers and Challengers

Contabilidad y finanzas para dummies Oriol Amat planeta de libros
www.dummies.es

Additional

Various interesting readings Vaarious interesting books to complement
Blank, S. G. (2013). Why the Lean Start-Up Changes Everything. Harvard Business Review.
Croll Alistair & Yoskovitz Benjamin (2013). Lean Analytics: Use Data to Build a Better Startup Faster. The Lean Series. CA: O'Reilly.
Martin, R. (2009). The design of business: why design thinking is the next competitive advantage. Boston Mass.: Harvard Business Press
Schrage, M. (2014). The Innovator's Hypothesis. How Cheap Experiment are Worth more than Good Ideas.

BLOGS various entrepreneurship blog web pages
Blog de Steve Blank, <http://steveblank.com/>

Blog de Eric Rise, <http://www.startuplessonslearned.com>
Blog de Alexander Osterwalder, Strategyer, <https://strategyzer.com/>
Blog de Justin Wilcox, Customer Development Lab, <http://customerdevlabs.com/>
Blog de Ash Maurya, <http://leanstack.com/> <http://www.ashmaurya.com/>
Blog de Seth Godin's Blog <http://sethgodin.typepad.com/> Blog de Paul Graham <http://paulgraham.com/articles.html>

BLOGS Various blogs

Blog de Chris Dixon <http://cdixon.org/>
Blog de 37signals <http://37signals.com/svn>
Blog de Salim Virani – Creator of Leancamp & Blog de Entrepreneur <http://www.saintsal.com/>
Blog de Tristan Kromer – Lean Startups and Customer Development <http://grasshopperherder.com>
Business Model Innovation Hub <http://businessmodelhub.com/>
Blog de Business Model Alchemist de Alex Osterwalder <http://www.businessmodelalchemist.com/>
<https://lanzadera.es/14-errores-que-todo-emprendedor-deberia-tener-en-cuenta/>