Name of Module: Communication and Management for I&E	Credit Points (ECTS): 4+2	Module-ID: SMZ1ID4
Person Responsible for Module (Name, Mail address): Cédric Ulmer, cedric.ulmer@francelabs.com, I&E UNS coordinator		
University: UNS	**Department: Computer Science, Faculty of Science**	

1. Prerequisites for Participation

According to general prerequisites for EIT Digital KIC master programs.

2. Intended Learning Outcomes

- **In depth understanding of the general process and roles involved in developing an idea and starting up a new technology-based company. This also includes strong communication skills, both written and oral.**
- **The ability to systematically explore customers and markets**
- **In depth understanding and the ability to systematically explore business organization and projects**
- **In depth understanding and the ability to systematically explore basic product and process development**
- **In depth understanding and the ability to systematically explore basic entrepreneurial finance**
- **In depth understanding and the ability to systematically explore the important elements in managing companies and developing its human resources**

3. Content

Idea generation, technology-based entrepreneurship, marketing and markets, organization and project management, new product and process development, entrepreneurial finance, human resource development.
It also includes a specific teaching about oral and writing skills as support for good communication channels.
As an option, it also includes a course for learning French (French as a Foreign Language).
More details are provided below.

4. Teaching and Learning Methods

The content of the module is based on lectures into the above mentioned topics..
The distribution for 6 ECTS is: 2 ECTS for communication skills course plus 2 ECTS as an option for communication skils in French, and 2 ECTS for the introduction on business development.

Total volume in class with mentors, lecturers, etc. (lecture, or practice labs): **54 h**. Obviously, students are asked to allocate approx. twice the same volume for self-study. Individual work consists of preparing for lectures and parts of assignments.

-**18h** in a compact format, which is the first 3 weeks, are dedicated to **communication skills**, both written and oral. One goal is to prepare for pitch and future business documents writing; a second goal targets scientific writing skills as required for the master thesis of the second year.

-**18h** during the first 3 weeks, are dedicated to learning French, both written and oral. The goal is to facilitate the understanding of the French culture as part of the European Union. This course, in case, can be taken as an option (for instance, if the student is fluent in French)

-**18h** for the introduction on how to develop a business, aka **Mini BDL**
The course lasts for 6 weeks, early in the semester. Within this period, the goal is to **rapidly present the business development** process, **taking a tiny but innovative business case** as an example. Students form small teams preferably merging different cultural, scientific background. The course is organized as 6 x 3 hours sessions. In each session, one specific theme is addressed, and the teams also work in a lab mode to develop their business idea that they will present at the end of the course.
It serves as an **overall motivation** for the other I&E courses. Indeed, it provides some structuration and respective articulation of the various concepts in business, concepts that are more deeply handled in other I&E courses. Besides, as it happens at the very beginning of the university year, it allows the students to rapidly get to know each other. Such a course has already been experienced at UNS for the computer science master 1 students taught in English. Course plan is:

- Session 1 : Introduction to innovation – Basics
- Session 2 : How to launch innovation : writing the Business Plan (I)
- Session 3 : Business Plan - BP (II)
- Session 4 : Entrepreneurship supports and funding
- Session 5 : Business Plan (III) –Ready to Pitch ?
- Session 6 : BP presentation (written & oral)

5. Assessment and Grading Procedures

1st course:
50% Presentation (group) + 50% examination on lecturing (individual)

2st course:
Oral and written individual evaluation, relative to the initial and final level of each student in French. 50% each

3nd course:
Based on both the written and the oral presentation for a total of 80%. 20% of the mark is individual and consists in ranking students according to their personal participation during the course. It is requested to apply the communication skills learned through the corresponding course in this module.

Global grade of the module: 1/3 for each course

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6. Workload calculation (contact hours, homework, exam preparation,..)

54h in class, and 100h personal work

7. Frequency and dates

Once a year, on 1st semester

8. Max. Number of Participants

No limit

9. Enrolment Procedure

None

10. Recommended Reading, Course Material

For the communication skills:
- Arnaud Legout. How to Give a Good Talk? Course material. Slides (cel-00529505, version 5, - 10 April 2013), INRIA, Sophia Antipolis, April 2013.
- J. M. Williams, G. G. Colomb. Style, Lessons in Clarity and Grace. Tenth edition.

For the Business development:
- Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers Wiley Desktop Editions. Authors Alexander Osterwalder, Yves Pigneur. John Wiley & Sons, 2010

- The Startup Owner's Manual: The Step-by-Step Guide for Building a Great Company, Volume 1. Authors Steven G. Blank, Bob Dorf. K&S Ranch Publishing LLC, 2012

- Technology Ventures: From Idea to Enterprise; Authors Richard C. Dorf, Thomas H. Byers. Edition 2; McGraw-Hill Higher Education, 2008

- Strategor. Authors Laurence Lehmann- Ortega, Frédéric Leroy, Bernard Garrette, Pierre Dussauge, Rodolphe Durand ; Collection: Livres en Or, Dunod 2013 - 6ème édition - 704 pages - 190x240 mm

11. Other Information (e.g. home page of module)

http://www.i3s.unice.fr/csmaster/mods/IandE.html