



Universidad Nacional Mayor de San Marcos
School of Computer Science
Syllabus of Course
Academic Period 2018-II

1. **Code and Name:** ET201. Entrepreneurship I (Mandatory)
2. **Credits:** 3
3. **Hours of theory and Lab:** 2 HT; 2 HP; (15 weeks)
4. **Professor(s)**

Meetings after coordination with the professor

5. Bibliography

- [BD12] Steve Blank and Bob Dorf. *The Startup Owner's Manual: The Step-By-Step Guide for Building a Great Company*. K and S Ranch, 2012.
- [BDN10] Thomas Byers, Richard Dorf, and Andrew Nelson. *Technology Ventures: From Idea to Enterprise*. McGraw-Hill Science, 2010.
- [Con96] Congreso de la Republica del Perú. *Decreto Legislativo N° 823. Ley de la Propiedad Industrial*. El Peruano, 1996.
- [Gar+14] René Garzozi-Pincay et al. *Planes de Negocios para Emprendedores*. Iniciativa Latinoamericana de Libros de Texto Abiertos (LATIn), 2014.
- [OP10] Alexander Osterwalder and Yves Pigneur. *Business Model Generation: A Handbook for Visionaries, Game Changers, and Challengers*. Wiley, 2010.
- [Rep97] Congreso de la Republica del Peru. *Ley N° 26887. Ley General de Sociedades*. El Peruano, 1997.
- [Rie11] Eric Ries. *The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses*. Crown Business, 2011.

6. Information about the course

- (a) **Brief description about the course** Este es el primer curso dentro del área de formación de empresas de base tecnológica, tiene como objetivo dotar al futuro profesional de conocimientos, actitudes y aptitudes que le permitan elaborar un plan de negocio para una empresa de base tecnológica. El curso está dividido en las siguientes unidades: Introducción, Creatividad, De la idea a la oportunidad, el modelo Canvas, Customer Development y Lean Startup, Aspectos Legales y Marketing, Finanzas de la empresa y Presentación.

Se busca aprovechar el potencial creativo e innovador y el esfuerzo de los alumnos en la creación de nuevas empresas.

- (b) **Prerequisites:** None
- (c) **Type of Course:** Mandatory
- (d) **Modality:** Face to face

7. Specific goals of the Course

- Que el alumno conozca como elaborar un plan de negocio para dar inicio a una empresa de base tecnológica.
- Que el alumno sea capaz de realizar, usando modelos de negocio, la concepción y presentación de una propuesta de negocio.

8. Contribution to Outcomes

- d) An ability to function on multidisciplinary teams. (**Usage**)
- f) An ability to communicate effectively. (**Assessment**)

- i) An ability to use the techniques, skills, and modern computing tools necessary for computing practice. (**Usage**)
- k) Apply the principles of development and design in the construction of software systems of variable complexity. (**Assessment**)
- m) Transform your knowledge of the area of Computer Science into technological enterprises. (**Assessment**)

9. Competences (IEEE)

- C2.** Ability to have a critical and creative perspective in identifying and solving problems using computational thinking. ⇒ **Outcome d**
- C10.** Understanding of the impact on individuals, organizations, and society of deploying technological solutions and interventions. ⇒ **Outcome f**
- C17.** Ability to properly express in oral and written media as expected from a university graduate. ⇒ **Outcome f**
- C18.** Ability to participate actively and as a member of a team. ⇒ **Outcome i**
- C19.** Ability to effectively identify the goals and priorities of their project, stating the action, the time and resources required. ⇒ **Outcome i**
- C20.** Ability to connect theory and skills learned in academia to real-world occurrences explaining their relevance and utility. ⇒ **Outcome k**
- C23.** Ability to undertake, complete, and present a capstone project. ⇒ **Outcome k**
- CS5.** Specify, design, and implement computer-based systems. ⇒ **Outcome m**

10. List of topics

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11. Methodology and Evaluation

Methodology:

Theory Sessions:

The theory sessions are held in master classes with activities including active learning and roleplay to allow students to internalize the concepts.

Lab Sessions:

In order to verify their competences, several activities including active learning and roleplay will be developed during lab sessions.

Oral Presentations:

Individual and team participation is encouraged to present their ideas, motivating them with additional points in the different stages of the course evaluation.

Reading:

Throughout the course different readings are provided, which are evaluated. The average of the notes in the readings is considered as the mark of a qualified practice. The use of the UTEC Online virtual campus allows each student to access the course information, and interact outside the classroom with the teacher and with the other students.

Evaluation System:

12. Content

Unit 1: (5)	
Competences Expected: C2	
Learning Outcomes	Topics
<ul style="list-style-type: none"> • Identificar características de los emprendedores [Familiarity] • Introducir modelos de negocio [Familiarity] 	<ul style="list-style-type: none"> • Emprendedor, emprendedurismo e innovación tecnológica • Modelos de negocio • Formación de equipos
Readings : [BDN10], [OP10], [Gar+14]	

Unit 2: (5)	
Competences Expected: C10	
Learning Outcomes	Topics
<ul style="list-style-type: none"> • Plantear correctamente la vision y misión de empresa [Usage] • Caracterizar una propuesta de valor innovadora [Assessment] • Identificar los diversos tipos y fuentes de innovación [Familiarity] 	<ul style="list-style-type: none"> • Visión • Misión • La Propuesta de valor • Creatividad e invención • Tipos y fuentes de innovación • Estrategia y Tecnología • Escala y ámbito
Readings : [BDN10], [BD12], [Gar+14]	

Unit 3: (5)	
Competences Expected: C17	
Learning Outcomes	Topics
<ul style="list-style-type: none"> • Conocer estrategias empresariales [Familiarity] • Caracterizar barreras y ventajas competitivas [Familiarity] 	<ul style="list-style-type: none"> • Estrategia de la Empresa • Barreras • Ventaja competitiva sostenible • Alianzas • Aprendizaje organizacional • Desarrollo y diseño de productos
Readings : [BDN10], [OP10], [Rie11], [Gar+14]	

Unit 4: (20)	
Competences Expected: C18	
Learning Outcomes	Topics
<ul style="list-style-type: none"> • Conocer los elementos del modelo Canvas [Usage] • Elaborar un plan de negocio basado en el modelo Canvas [Usage] 	<ul style="list-style-type: none"> • Creación de un nuevo negocio • El plan de negocio • Canvas • Elementos del Canvas
Readings : [OP10], [BD12], [Gar+14]	

Unit 5: (20)	
Competences Expected: C19	
Learning Outcomes	Topics
<ul style="list-style-type: none"> • Conocer y aplicar el modelo Customer Development [Usage] • Conocer y aplicar el modelo Lean Startup [Usage] 	<ul style="list-style-type: none"> • Aceleración versus incubación • Customer Development • Lean Startup
Readings : [BD12], [Rie11], [Gar+14]	

Unit 6: (5)	
Competences Expected: C20	
Learning Outcomes	Topics
<ul style="list-style-type: none"> • Conocer los aspectos legales necesarios para la formación de una empresa tecnológica [Familiarity] • Identificar segmentos de mercado y objetivos de marketing [Familiarity] 	<ul style="list-style-type: none"> • Aspectos Legales y tributarios para la constitución de la empresa • Propiedad intelectual • Patentes • Copyrights y marca registrada • Objetivos de marketing y segmentos de mercado • Investigación de mercado y búsqueda de clientes
Readings : [BDN10], [Rie11], [Con96], [Rep97], [Gar+14]	

Unit 7: (5)	
Competences Expected: C23	
Learning Outcomes	Topics
<ul style="list-style-type: none"> • Definir un modelo de costos y utilidades [Assessment] • Conocer las diversas fuentes de financiamiento [Familiarity] 	<ul style="list-style-type: none"> • Modelo de costos • Modelo de utilidades • Precio • Plan financiero • Formas de financiamiento • Fuentes de capital • Capital de riesgo
Readings : [BDN10], [BD12], [Gar+14]	

Unit 8: (5)	
Competences Expected: CS5	
Learning Outcomes	Topics
<ul style="list-style-type: none"> • Conocer las diversas formas de presentar propuestas de negocio [Familiarity] • Realizar la presentación de una propuesta de negocio [Usage] 	<ul style="list-style-type: none"> • The Elevator Pitch • Presentación • Negociación
Readings : [BDN10], [BD12], [Gar+14]	