	Competence oriented

COURSE SYLLABUS
Tech and Innovation

Economics and Business Department's Mission

Contribute to economic and social development through the generation and dissemination of advanced knowledge and the training of professionals of excellence in the field of management and economics, who are distinguished by their entrepreneurial capacity, global mindset, innovative attitude and who are capable to become protagonists in generating value and impact in organizations.

A. General Backgrounds

1. **Academic Unit**	**ECONOMICS AND BUSINESS DEPARTMENT**					
2. **Career**	Tech and Innovation					
3. **Course code**	ECI327					
4. **Curriculum's location**	Year III, Semester II					
5. **Credits**	10					
6. **Type of course**	Mandatory	X	Elective		Optional	
7. **Duration**	Bimestrial		Semesterly	X	Annual	
8. **Weekly modules**	Theoretic classes	2	Practical classes	0	Workshops (*Ayudantías*)	0
9. **Academic hours**	Sessions	68	Workshops		Does not have	
10. **Prerequisite**	Marketing I, Inglés IV					

B. Contribution to the Graduate's Profile

The Ingeniero Comercial of the Universidad del Desarrollo is a professional who is trained in the field of administration and capable of not only understanding the evolution of the national and global economy but is also capable of successfully performing functions in management and business creation. This professional is characterized by his or her entrepreneurial capacity, leadership and teamwork, committed to the development of the country, acting with virtue in their academic and professional work, and prepared to face the commercial world.

This intermediate business course builds on the ICO curriculum (Marketing, Finance, Microeconomics, Macroeconomics and other business management courses) to engage students on the modern issues, challenges and vast opportunity from the advent of various technologies and their effect on processes, entrepreneurship and business models. Topics are intended to have broad appeal to those with interest

in General Management, Marketing, Product Development, and Entrepreneurship. Additionally, this course will deal with the uniqueness while comparing and contrasting innovation in corporate transformation environments, high-growth stages and start-up
environments. The rules of business have changed due to the rise of digital technologies, this is threatening and transforming established business models and processes. Every business has a digital future, it is just a matter if time. The curriculum is highly interdisciplinary and requires the mastery of basic fundamentals of economics, finance, operations, accounting, and marketing.

Pertenece al ciclo de Licenciatura y al área de formación de "Marketing". El aporte al perfil de egreso se traduce también en que esta asignatura promueve el desarrollo de las Competencias Genéricas de "Ética", "Eficiencia" y "Visión Global".

C. Competencies and Learning Outcomes from the Course

Generic Competencies	General Learning Outcomes
Emprendimiento y Liderazgo	1. Combine customer-centricity with modern business models to incorporate decentralized innovative spaces and value systems such as crowdfunding, citizen science, crowdsourcing, block-chain, and platforms & ecosystems writ large.
Specific Competencies	
Trabajo en equipo	2. Explain modern impactful technology that creates challenges and opportunities and become literate in speaking about and organizing thoughts about categories of tech and innovation. Build a gut-feel for how technology functions and how to interface positively with technical professionals. Understand, converse and use digital tools in transformation of and rebirth of established businesses and business models. Digital transformation is not simply a webpage, big data, block chain, and apps you can buy. Rather, it is a deep and strategic change that affects the whole organization and its stakeholders culturally. It changes the very way companies create value and deliver value to their customers.
Manejo de Tecnologías de Información	
Integración y Aplicación de Conocimientos	
Ética	
Eficiencia	
Visión Global	

	Utilize customer centricity and primary research methods to identify jobs-to-be-done, and create a modern innovation value system and in-turn business concept design
	3. Apply technology to create innovation to establish strategies with sustainable competitive advantage in environments of rapid change.
	Define opportunities and value spaces in industries of innovation (not only firm-level) to assess, create and shape entrepreneurial innovation in corporate, spin-off and start-up scenarios
	Appreciate and address the major types of problems facing the modern manager: such as communicating and negotiating with technology professionals, providers, marketing managers, general management, product development, finance, and entrepreneurs with an emphasis on developing sound strategy and effective tactical execution in the environment of rapid change in environment and tools.
	Understand the chaotic nature of nascent technologies and the need to create feedback loops and flexibly but responsibly morph business model and product as information is available.
	Improve the ability to communicate complex technical issues in a clear, concise and compelling manner.

D. Units, Content and Learning Outcomes

Units and Content	Competency (Name)	Learning Outcomes (by unit and specific/generic competency)
Cross-functional Foundations: Introduction to the cross-functional nature of technology and innovation. Establishing communication standards and integrated expectations. • Define Marketing broadly as a function across an organization • Define the Product and Service Process Construct • Define the Marketing Construct • Communications strategies for strategic storytelling • Differentiate between market segments and personify	Emprendimiento y Liderazgo	• Develop a target-oriented intuition that helps the students make memorable emotionally driven point(s) • Practice Practice Practice
1. Business Model Design: Thinking beyond Business Model Canvas to an environment of rapid and unpredictable change. Train in and establish new tools to architect enterprise success. • The power of customer centric vantage point in defining products • Diffusion principles of word-of-mouth especially in new era of social media • New business model and product creation • Establish a positioning strategy for brands and products • Pricing Strategy	*Trabajo en equipo*	• Analyze and define customer needs • Identify customer segments as the first and important step in successful new product introduction (can be counter-intuitive) • Build a Value Network and Business Concept Innovation "canvas" in a highly-innovative space • Establish Basic pricing dynamics for new products, Know the different techniques for establishing a price, Understand the difference between value-based pricing and other techniques, How

		to deal with changing segments and pricing models • Be able to create and present a product road map for various roles • Use techniques and messaging to influence and position new products internally as well in the marketplace
2. **Assessing and shaping Opportunities: Given research and value system, define a success journey through innovative thinking.** • Action! • Align a positioning strategy with the differentiation efforts of the new product offering and morph product offering • Understand how to identify and evaluate an opportunity • Ultimatums: GO/NO GO and STOP and Pivot or Persevere • Strategy tools to identify and define opportunity and adjust as necessary • Balancing Passion vs. Flexibility		• Action! • Analyze markets • Utilize tools to identify and communicate opportunities • Cases and Research Process • Identify when to use various complex pricing and promotional techniques such as free, gift with purchase, trial, subsidy (Gillette model), and bundled prices. • Be able to establish a price(s) for a platform, network, new product or new service

3. **Launching Plan:** • Know the characteristics and ingredients of a Product Launch Plan • Managing, evaluating, and refining launch plans managing risk and uncertainty • Executing and course correcting and redefining products, iterations, or new categories	Manejo de Tecnologías de Información Integración y Aplicación de Conocimientos	• Create, evaluate, and communicate launch plans • Beginning to end launch plan in groups of real products **Attitudinal objectives for all New Product Launch plans:** • Encourage analytical thinking and written/oral English skills. • Manage proficiently both the strategic elements and the tactics of execution of elements. • Value successful and unsuccessful product launches studied on each of the case analyses that will ultimately allow students build a strong intuition and ability to execute.
5. **Technology Exploration: Build intuition for what capabilities technology enables. Incorporate a variety of different technologies into learning plan to stimulate proactive ideation. Create minimal competencies in describing technology and in innovation inquisition.** • **Know the categories and organization of types of technology** • **Understand the various forms such as technology taxonomy, business transformation technology, and**	Manejo de Tecnologías de Información	• Use scratch and basic coding to create simple tasks in app inventor and other tools to make application prototypes. Apply AI and learn to quickly and easily communicate an idea through building mock websites, mobile apps, social sites • Discover new methodologies in 3D modeling, introducing digital fabrication and rapid prototyping with a

industrial opportunities • **New technologies and development and commercial alternatives**		focus on extrusion technologies and understand the pros on cons of each and when to use which method • Use data science and business intelligence systems to create visualization to understand the value of data sets in the creation of business information, understanding, knowledge and decision making.
6. Digital Transformation: The rules of business had changed due to the risen of digital technologies, this is threatening and transforming business models and processes. Every business has a digital future, it is just a matter if time. Digital strategy is not about understanding technologies to apply them, it actually is an Organizational Leadership Mindset, to understand how the world changes and foresee digital opportunities. • Customers • Competition: Digital technologies transform how we need to think about competition. More and more, we are competing not just with rival companies from within our industry but also with substitutes and companies from outside our industry that are stealing customers away with their new digital offerings and competition in platforms. • Innovation: digital technologies enable and demand rapid and constant experimentation, e reducing the cost of learning, testing with	Integración y Aplicación de Conocimientos *Trabajo en equipo*	• Develop data as asset, find new applications that create value in the creation of business information, understanding, knowledge and decision making. • Identify how new tech opens up new opportunities for my business to create value for customers that were not possible before. • Use the five domains of strategy that have specifically been changed through digital technologies to build a digital success journey: 5 domains of strategy that had been transformed by digital technologies: customers, competition, data, value and innovation.

the market in rapid experimentation, low risk. • Data: With social media and sensors on every object in a company´s supply chain, every business now has access to a river of unstructured data that can be utilized with new analytical tools. • Value: Digital technologies force us to think differently about how do we understand and create value for the customer. What customer value can change very quickly, and our competitors are constantly uncovering new opportunities that our customers may value. • New technologies and development and commercial alternatives		

E. Teaching Methods

It is advisable to start working on the case studies/videos only after having completed the related reading of the course material, since the assignments are related to the chapter topics

METHODOLOGY
Course Expectations
Specific Skills and Competences to be enhanced
• Encourage analytical thinking and written/oral English skills.
• Encourage group interaction and collaboration.
• Identify managing abilities needed in the different areas to be studied.
• Use and understanding of IT tools in all areas.
• Integration and application of the new knowledge acquired for final evaluation.
• Encourage proactive approach to the market.

Course Methodology
Various forms of learning will be used including lectures, business cases, and potentially professional guest speakers. Readings in English will include textbook and business literature excerpts. Current business events may be discussed as relevant. Broadly, this class positions marketing a discipline writ large and gives students practice of the ability to add value through customer centric vantage point for new product definition, execution and evaluation. All material presented in English. Role of professor: to teach to acceptable professional standards such that student has actionable capabilities conceptually and practically. To treat the class as if they are stakeholders in a company, and evaluate incorporate

student perspective and point of view. The professor is the "facilitator" of student learning. Role of student: Be prepared: read the cases, read the assigned literature and notes, have questions ready, challenge peers and professor courteously, build well prepared arguments.

Be aware: during this class look at life through the lens of a professional in every touchpoint with products – from a sip of bottled water to grocery shopping, to walking shopping malls. Read, lots online. You can and should incorporate any external learning and knowledge. Be engaging: participate, voice yourself, don't let "dead space" go useless as there are lots of topics and interesting tangents to cover. Take active responsibility for your learning.

Papers, presentations, and communications are evaluated on completeness, clarity and conciseness. Plenty of opportunity to hone these skills throughout the class. End of class capability and growth are critically important.

F. Evaluation

1. Attendance, Class Participation (discussion, questions and answers), Group Exercises.
2. Mid term (individual).
3. Mid term 2 (group project).
4. Final exam.

Evaluation description In Class: Attendance, Class Participation, Group Exercises
Group Exercises A few group exercises will contribute to this mark. Evaluation will be made based upon success of the group AND upon individual contribution within group. Each group member will "professionally and constructively" evaluate each other group member. Time permitting, each group will "professionally and constructively" evaluate and feedback each other group. Marks will also be dependent upon evaluation and feedback.

Cases and class participation
You are required to complete reading cases weekly during the semester; each case is strategically selected to give you a practical perspective that should enable you to have a marketing and managerial outlook on the situation that is being analyzed**.** Each case due date is clearly noted in the week to week calendar and the weeks topic. you do have the option to work in groups. Marks are based on individual remarks based on depth, contextual understanding, originality, and evaluation/analysis. There may be case reports scheduled for certain weeks in lieu of discussion, but with advanced warning.

Mid Term Exam
You are required to complete 2 in class Tests/Certamen as per the normal Subject requirements that you are familiar with during each semester, these are designed to
test your understanding of the key concepts covered in each of the learning modules.*Task Length* – Each test will have a maximum time length of 2 hour and 40 minutes, but may require pre class prep (reading and prepping a case as an example).

Group Project
This major project is a group task that deals with a new technology. This assignment is designed to encourage you to gain as many different perspectives as you can, to work as a group and to develop communication skills. The written report on this project should be less than 10 pages (excluding appendices): executive brief. A title page (with student name, id number, and project title and a reference list must be included. Use clear and concise language with exceptional clarity and please

carefully edit the assignment for grammatical and spelling errors. Imagine you are presenting to your CEO. For this project, ample class time will be provided with aid from T/A and Professor to be equally distributed by group. All external primary and secondary research is permitted and encouraged. During technology selection early in the term, professor and t/a can aid with possible contacts BUT the final responsibility of selection and research is lies with the group. Specifics regarding requirements and evaluation in more detail will follow post midterm.

Comprehensive Final Exam: Individual and Group Case-Based Technology Strategy Exam

G. Learning Resources

HBR INDUSTRY AND BACKGROUND NOTE Hypothesis-Driven Entrepreneurship: The Lean Startup Thomas R. Eisenmann; Eric Ries; Sarah Dillard Added on Dec 30, 2015 Details

HBR ARTICLE Preparing for the Perfect Product Launch James P. Hackett Added on Dec 30, 2015

HBR CORE CURRICULUM READING Marketing Reading: Segmentation and Targeting Sunil Gupta Added on Dec 30, 2015 Details

HBR INDUSTRY AND BACKGROUND NOTE Marketing Research Fareena Sultan Added on Dec 30, 2015 Details

HBR INDUSTRY AND BACKGROUND NOTE Market Segmentation, Target Market Selection, and Positioning Miklos Sarvary; Anita Elberse Added on Dec 30, 2015 Details

HBR INDUSTRY AND BACKGROUND NOTE Pricing, Profits and Customer ValueFrank V. Cespedes; Benson P. Shapiro; Elliot B. RossAdded on Dec 30, 2015 Details

HBR FORETHOUGHT ARTICLE Why Most Product Launches Fail Joan Schneider; Julie Hall Added on Dec 30, 2015 Details

BOOK READINGS & EXCERPTS:

The Lean Startup: How Today's Entrepreneurs Use Continuous Innovation to Create Radically Successful Businesses Sep 13, 2011 by Eric Ries (Required excerpts, recommended reading of full book)

Leading the Revolution Jul 30, 2002 by Gary Hamel (Required Excepts)

Beyond Bullet Points by Cliff Atkinson (Required excerpts, recommended reading of full book)

Trading Up: Why Consumers Want New Luxury Goods--and How Companies Create Them Apr 29, 2008 by Michael J. Silverstein and Neil Fiske (Required excerpts, recommended reading of full book)

Purple Cow by Seth Godin (Required reading of full book)

Crossing the Chasm and Inside the Tornado, 3rd Edition: Marketing and Selling Disruptive Products to Mainstream Customers (Collins Business...Jan 28, 2014 by Geoffrey A. Moore (Required excerpts, recommended reading of full book)

HBS Cases will be assigned in advance Optional reading list follows, other readings may be utilized as well: Networks, FM Radio Launch, PlayStation,

Killer Brands: Create and Market a Brand That Will Annihilate the Competition
Action Trumps Everything: Creating what You Want in an Uncertain World Book by Charles F. Kiefer, Leonard A. Schlesinger, and Paul B. Brown n m3.8/5·AbeBooks Originally published: 2010 n Authors: Charles F. Kiefer, Leonard A. Schlesinger, Paul B. Brown