**Course Description**

Our society experiences times of clear transformation in the way we perform basic tasks such as communicating, working, buying or enjoying free time. Technology, and in particular solutions such as social networks, mobile communications, telework, e-commerce or video games are changing the way we live, usually described as digital transformation.

All these changes affect the way to implement business and require significant changes in the companies offering these products and services and it is forcing them to teach and hire a new profile of employees: digital professionals.

An important aspect of this transformation is that it has already begun in people, whether consumers, users, customers or citizens; Through mobile devices (mobility) and networks of greater capacity and storage capacity (cloud) and proper use of data (bigdata), we demand new ways to consume these services.

There are many examples of new companies that are breaking into traditional sectors and challenging companies with many years of experience and consolidated. It is also being transformed by companies such as Amazon, Apple, Spotify, AirBnB, Booking, Wallapop, Paypal and Tesla. But also companies we can define as traditional, which are undergoing very important transformation processes in sectors such as utilities, banking, telecommunications or retail, such as Gas NATURAL, BBVA, Telefónica and Zara.

E-business, is the application of information and communication technologies (ICT) in support of all the activities of business. During the course, we will focus in mobility, cloud and bigdata and how companies are using the technology to transform how they create value to their customers.

Therefore, the course will be of value to students planning careers in digital strategy, digital communication, digital marketing, social media, digital analyst, e-commerce, mobile development, big data and open data, among others.
Objectives

Specifically, the course objectives are to:

- Help you understand how digital revolution is transforming current businesses and creating new ones
- Help you understand the technologies around mobile solutions (mobility, cloud, big data)
- Expose you to a number of examples of the successful use of digital transformation
- To learn to conceptualize and create digital product, introducing Business Model Canvas, SCRUM, ...

Note: the course does not aim to cover programming

Methodology

The course will combine relevant theoretical material with a selection of applied cases. The theory is divided in two main tracks:

THEORY HORIZONTAL. Covering topics as user centered design, smart mobility, market evolution, mobile related technologies (apps, locations services, proximity solutions, augmented and virtual reality, ...),

THEORY VERTICAL. Specifically, this course will introduce different sectors or areas being transformed by digital products and solutions, among others:

- mCommerce
- mGovernment
- mAnalytics
- mWorkForce
- mPayments
- mHealth and wearables
- mThings (car, home, iot...)
- Interactive Screens and multichannel solutions: web, app, interactive digital signage, smartTV

PRACTICAL

Using lecture material, case-studies, class discussion and related exercises, students will develop benchmarkings among different companies and specific business plans in various decision contexts.

The pedagogical philosophy in this course embraces the principle of learning by doing. Students are expected to struggle at times, which is the learning by doing process, both in individual assignments and within a group.

As an example, past years different real case-studies have been discussed and in some cases presented by the real company during the class like “Gas Natural, mobilizing our salesforce”, “Barcelona City Council, a complete apps offering”, “Condis Supermarket, first mCommerce solution”, ...

Other times, the student assumes the role of responsible within the company, deciding the strategy and the solution most appropriate for the problem raised. Some examples: “SmartTV present and future”, “mHealth Innovative iniciatives”, “New ways of shopping”, ...

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Finally, “The App Challenge” is a final project where a complete digital solution is presented in public together with a memory (50 pages, one and a half-spaced pages, 12 font).

Sometimes the lecture will use assigned readings as a starting point to investigate selected topics in greater detail. Students are expected to read the assigned materials before coming to class.

**Evaluation criteria**

**Grading**

- Class Participation - 20% - awarded for advancing and contributing to the debate in class, cases, homework, ...
- 3 Cases / Projects – 10% each
- Final Project - 30% - “The app challenge”
- Final exam - 20% - A multiple choice final test

Quality of participation is what counts: If you do not have a response, say so. Do not waste your classmates’ time. Monopolizing a class will backfire and will hurt your participation grade. Regularity in participation is expected. Aim at participating in every case. Do not feel offended if I cut you off in the middle of a comment. Attending class is a necessary, but not a sufficient condition for participation credit.

Students are required to attend 80% of classes. Failing to do so without justified reason will imply a Zero grade in the participation/attendance evaluation item and may lead to suspension from the program.

As with all courses taught at the UPF BSM, students who fail the course during regular evaluation will be allowed ONE re-take of the examination/evaluation. Students that pass any Retake exam should get a **5 by default as a final grade for the course.** If the course is again failed after the retake, students will have to register again for the course the following year.

In case of a justified no-show to an exam, the student must inform the corresponding faculty member and the director(s) of the program so that they study the possibility of rescheduling the exam (one possibility being during the “Retake” period). In the meantime, the student will get an “incomplete”, which will be replaced by the actual grade after the final exam is taken. The “incomplete” will not be reflected on the student’s Academic Transcript.

Plagiarism is to use another’s work and to present it as one’s own without acknowledging the sources in the correct way. All essays, reports or projects handed in by a student must be original work completed by the student. By enrolling at any UPF BSM Master of Science and signing the “Honor Code,” students acknowledge that they understand the schools’ policy on plagiarism and certify that all course assignments will be their own work, except where indicated by correct referencing. Failing to do so may result in automatic expulsion from the program.”
Calendar and Contents

Please, note the detailed calendar is based on 10 sessions (3h each) from last course may vary:

Bio of Professor

Jorge is Telecommunications Engineer from the Polytechnic Center of Zaragoza with additional training in Marketing, Business Management and Business Management.

He has held different responsibilities such as pre-sales, product and project manager and account manager at Ericsson and Vodafone, with national and international responsibilities.

In 2006, he joined Tempos 21, a leading company in mobility solutions of the Telefónica group that was acquired in 2008 by Atos, where he has been commercial director of the Mobility Competence Center of Atos in Barcelona. Since 2013, the Tempos 21 brand disappears in the new Wordline.

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