Universitat Autònoma de Barcelona

2019/2020

Information Technologies Management

Code: 102160
ECTS Credits: 6

Degree	Type	Year	Semester
2501232 Business and Information Technology	OT	4	0

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: No
Some groups entirely in Spanish: No

Teachers

Ignacio Izaga Martinez
Ramon Salabert Parramon
Mario Yelamos Rebolledo

Prerequisites

None

Objectives and Contextualisation

Objectives:

- Lead change processes in the management and provision of services to society.
- To undertake ideas and solutions for Companies that generate efficient proposals in the way of providing the services.
- To place the client as a central element of the processes.
- Visualize organizations by incorporating digital strategies.
- Know the strategies and frameworks of reference in the management of Information Technology and Communications services, and have enough knowledge to support the implementation of a strategy of service in companies and other organizations.

Key Vectors:

- Promote entrepreneurial activity
- Understand innovation as a philosophy of life
- Deepening the knowledge and proper use of digital tools
- Focus on quality of service and customer service
- Boost talent and enhance teamwork of talented people
- Be able to lead digital technological implementations in business
- Modulate thinking structures that are flexible and fast to adapt to changes
- Find new ways to provide quick solutions to unexpected problems

Competences

- Communicating with experts of other fields and non-experts.
- Demonstrating a comprehension of the business information systems, taking into account their three specific dimensions (informational, technological and organisational) and being active in the specification, design and implementation of said systems.
- Demonstrating a concern for quality in the objectives and development of the work.
- Demonstrating the ability to plan in accordance to the objectives and available resources.
- Proposing and managing the implementation of information systems depending on the quality requirements, sustainability and security in order to help them meet the organisation objectives.
- Working in teams, sharing knowledge and communicating it to the rest of the team and the organisation.

Learning Outcomes

1. Communicating with experts of other fields and non-experts.
2. Demonstrating a concern for quality in the objectives and development of the work.
3. Demonstrating the ability to plan in accordance to the objectives and available resources.
4. Drawing up coherent proposals related to information technologies in accordance with the strategic plan of an organisation.
5. Proposing and managing the implementation of information systems depending on the quality requirements, sustainability and security in order to help them meet the organisation objectives.
6. Working in teams, sharing knowledge and communicating it to the rest of the team and the organisation.

Content

1. The CIO as responsible for the Management and Administration of ICT

- The CIO and the entrepreneurial mindset. Evolution of the role of the CIO
- Importance of female talent and its incorporation into managerial tasks
- Engage in global markets. International trade
- Systems of business organization

2. Clients, central axis. Customer Centric.

- The economy of data. The client as the centre of the business
- Be prepared for e-commerce
- Digital marketing Marketing 4.0
- Customer service and service

3. Internal management of the SI service

- Frameworks in the quality of service management: ITIL, MOF and CMMI-Svc
- Processes and service management
- Service Strategy
- Service Design
- Service Transition
- Service Operation

4. The CIO and the Digital Transformation

- Legacy systems. Corporate systems and new digital needs. Bimodal IT
- Digital disruption and changes in user behaviour
- Internet business. Collaborative economy. Circular economy
- Business models. Transverse impact on all sectors
- Successful models of companies that have applied it

5. Leading business technology

- Digital tools Big Data. Data Analytics
- IoT. Smart models: Smart Cities. Smart products. Smart Business Smart Manufacturing
- Automation of processes and robotics. Machine Learning
- Artificial Intelligence (IA)
- Cryptomonedes Blockchain

6. 5G. Opportunities for new businesses and services

- What is 5G? Historical evolution
- 5G technology. Importance of its deployment
- Impact of 5G on businesses, products and services
- Integrated platforms like new business models

7. Attract Talent

- What is and how innovation is produced?
- Talent Need. A scarce and indispensable resource. Talent, diversity and Gender.
- High-performance teams and working environment
- R+D+i. Open Innovation

8. Fast adaptation to change

- Sensitivity to the environment. Technological Surveillance. Quick detection of changes
- Reluctance to changes. Young organizations versus traditional organizations
- Agility in the rapid deployment of changes

9. Digital ethics and cybersecurity

- New technologies and ethical dilemmas
- Security in processes
- Systems of rapid detection of non-ethical behaviours
- Anti-corruption tools. Anti-discrimination Antivulneration human rights
- Informative transparency versus data protection
- Work with legislative loopholes and regulations
- Critical thinking and ethical behaviour

Methodology

General features
This subject has as a methodological base the learning based on the knowledge imparted in the theory sessions and the application of the same in the cases, problems or exercises and workshops developed in the course.

Master classes
In the theory sessions, the concepts that the students will apply in the exercise classes are explained.

Cases, problems and exercises
In the problem sessions, cases and exercises that students must perform individually or in groups and deliver in class or via CV before the deadline are ordered. The objective is for the students to apply the concepts and procedures learned in the theory sessions.

Laboratory practices
In the lab sessions, students will have the opportunity to incorporate the theoretical concepts into a real service management tool.

Languages
The vehicular language will be Catalan. If there are assistants with significant difficulties to follow Catalan, it will be taught in Spanish. A significant part of the support materials (transparencies, exercise statements, cases, software, etc.) will be in English. The exams and papers can be answered in Catalan, Spanish or English.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Case Studies, problem solving	10	0.4	1, 3, 4, 5, 6
Lab practices	16	0.64	3, 2, 4, 5, 6
Theory MasterClass	19	0.76	1, 3, 2, 5
Type: Supervised			
Tutorship	15	0.6	1, 3, 5
Type: Autonomous			
Case study preparation, writings and problem solving	32	1.28	1, 3
Study	56	2.24	3, 4, 5

Assessment

General Conditions to Approve

- At least 5 out of 10 must be taken to pass

1. Continuous assessment (60%) two parts:
    1. CA1: Laboratory Practices (35%). 6 practices in the computerized classroom. Plus a 7th. practice that will serve as individual validation of the previous practices and will serve to fix the note of this part
    2. CA2: Participation, Exercises and work (25%): Problem-based learning exercises, case discussion, individual or teamwork, presentation in class of the results and other tests that are determined. Class participation will also be valued.
    3. On the Continuous Assessment part, it is necessary to have a 5/10 to pass the subject and given its diversity cannot be recovered. If you do not have a 5/10 note, the resulting score of CA will be the minimum between the mark obtained and 3/10
3. Exams (40%):
    1. Partial exam in the week set by the dean. 50% of the note (variable according to contingencies that did not allow the planned course)
    2. Final exam divided into two parts:

        Students who have not passed the first part or want to raise a note (they must notify them beforehand) can be presented again in the first part. The resulting grade will be the highest of the two exams.

        The second part corresponds to the rest of the syllabus.

        The resulting grade from the part of the exams will be the weighted average of the two parts.

Calendar of evaluation activities

The dates of the evaluation activities (midterm exams, exercises in the classroom, assignments, ...) will be announced well in advance during the semester.

The date of the final exam is scheduled in the assessment calendar of the faculty.

"The dates of evaluation activities cannot be modified unless there is an exceptional and duly justified reason why an evaluation activity cannot be carried out. In this case, the degree coordinator will contact both the

teaching staff and the affected student, and a new date will be scheduled within the same academic period to make up for the missed evaluation activity." ***Section 1 of Article 115. Calendar of evaluation activities (Academic Regulations UAB)***. Students of the Faculty of Economics and Business, who in accordance with the previous paragraph need to change an evaluation activity date must process the request by filling out an Application for exams' reschedule
https://eformularis.uab.cat/group/deganat_feie/application-for-exams-reschedule

Grade revision process

After all grading activities have ended, students will be informed of the date and way in which the course grades will be published. Students will be also be informed of the procedure, place, date and time of grade revision following University regulations.

Retake Process

"To be eligible to participate in the retake process, it is required for students to have been previously been evaluated for at least two-thirds of the total evaluation activities of the subject." Section 3 of Article 112. The recovery (UAB Academic Regulations). Additionally, it is required that the student to have achieved an average grade of the subject between 3.5 and 4.9.

The date of the retake exam will be posted in the calendar of evaluation activities of the Faculty. Students who take this exam and pass will get a grade of 5 for the subject. If the student does not pass the retake, the grade will remain unchanged, and hence, the student will fail the course.

Irregularities in evaluation activities

In spite of other disciplinary measures deemed appropriate, and in accordance with current academic regulations, *"in the case that the student makes any irregularity that could lead to a significant variation in the grade of evaluation activity, it will be graded with a 0, regardless of the disciplinary process that can be instructed. In case of various irregularities occur in the evaluation of the same subject, the final grade of this subject will be 0"*. ***Section 10 of Article 116. Results of the evaluation. (UAB Academic Regulations).***

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Continous Assesment 1: Lab Practices	40%	0	0	1, 3, 2, 4, 6
Continuous Assesment 2: Exercices, classwork and participation	20%	0	0	1, 3, 2, 4, 5, 6
Exams	40%	2	0.08	1, 4, 5

Bibliography

See Virtual Campus