

# COURSE DATA

Data Subject					
Code	33864				
Name	Information Technology II				
Cycle	Grade				
ECTS Credits	6.0			$\sim$	
Academic year	2020 - 2021				
Study (s)					
Degree		Center	Acad year	. Period	
1007 - Degree in Int Documentation	formation and	Faculty of Geography	and History 1	Second term	
Subject-matter					
Degree		Subject-matter	Chara	acter	
1007 - Degree in Information and Documentation		16 - Information technol	ology Basic	: Training	
Coordination					
Name		Department	Department		
COMA TATAY, INMACULADA		240 - Computer Science			
DURA MARTINEZ, ESTHER		240 - Comput	240 - Computer Science		
TORRES MARTINEZ, EMILIANO		240 - Computer Science			

# SUMMARY

This course follows the course in Information Technology already taken by students in the first semester. The main goal of this course is to focus on the foundations of computer systems from the perspective of file structure and supports, with special attention to electronic documents and digital editing, web publishing through markup languages, the logics of information retrieval, as well as the tools and advanced services on the Web. It is therefore intended that students will acquire knowledge and skills that can be used in personal and professional practice in their future as graduates in Information and Documentation.



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# PREVIOUS KNOWLEDGE

#### Relationship to other subjects of the same degree

There are no specified enrollment restrictions with other subjects of the curriculum.

#### **Other requirements**

It is recommended to have attended Informatica I.

## OUTCOMES

#### **1007 - Degree in Information and Documentation**

- Capacity to write analytical reports and summaries with regard to management and organisation of information.
- Demonstrate organisational and planning skills.
- Have oral and written communication skills in one's own language.
- Have computer skills related to the field of study.
- Have skills for information management.
- Have problem-solving skills.
- Have decision-making capacity.
- Be able to work in a team and to integrate into multidisciplinary teams.
- Be able to apply critical reasoning to the analysis and assessment of alternatives.
- Be able to learn independently.
- Be able to adapt to changes in the environment.
- Be able to undertake improvements and propose innovations.
- Show creativity.

## LEARNING OUTCOMES

Evaluation of the course will follow a scheme of continuous assessment considering the following aspects:

Written test: There will be one final written exam dealing with theoretical and practical issues. The minimum score that students must achieve to pass the course is 5 points out of 10. The mark obtained in this exam accounts for 50% of the final mark.



Preparation of lectures: The activities and problems proposed in theory classes account for 15% of the final mark. All exercises are compulsory for the student to receive a mark for this subject in the first call.

Practical work: Marks obtained in this section are worth 25% of the final mark. All practical projects are compulsory. The minimum mark that the student must achieve in this block is 5 points out of 10 for this mark to be counted towards the final mark.

Team work: The evaluation of teamwork will consider both the marks of the group and of the individual members. The mark obtained in this section accounts for 10% of the final mark. All teamwork is mandatory for the student to receive a mark for this subject in the first call.

The composition of the final mark is summarized in the following table:

FINAL TEST	50%	
PREPARATION OF THE LECTURES	15,00%	
PRACTICAL WORK	25,00%	
TEAM WORK	10,00%	
TOTAL	100 %	

This assessment is based on the premise that teaching at the University of Valencia is, by definition, classroom-based teaching. In this sense, students should be aware that attendance at both theory and practical sessions is essential for the proper understanding of the contents. Students must also bear in mind the possibility of part-time enrolments (except in the case of first-year students) when they are unable to attend all the subjects that make up a complete academic year (60 credits). However, in duly justified circumstances, students may request to be assessed without attending none or some of the lessons. In such cases, the following procedure must be followed:

- At the start of the year, students must inform the course head lecturer(s) of the reason why they are unable to attend class by providing written proof.

- Based on this information, the head lecturer will decide on the possibility of exempting these students from attending all or part of the classes.



To be assessed, students who are in this situation must submit all the assignments required by the lecturer (not necessarily identical to those required during the course). Also, they may be asked to defend their assignments orally in front of the lecturer, and they will have to pass a theory test. Assignments will be worth 50% of the final mark and the test will be worth the remaining 50%.

# **DESCRIPTION OF CONTENTS**

#### 1. Electronic documents and digital publishing

-Digital Library

-Generation of digital documents

-File formats: documents and images

-Preservation of digital documents

-Legal issues

#### 2. Web publishing: markup languages

-Markup language introduction -Markup languages: HTML and XHTML -Style language: CSS

#### 3. Logic of Information retrieval

-Basics of search engines and Information Retrieval. -Search strategies.

#### 4. Advanced Web

-Services, applications of the web 1.0 and web 2.0: definitions and features

-The library 2.0

-Semantic web: definition and features

### 5. Media and file structures

-Media types and access time

-Files: definitios and concepts

-Files organization



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# WORKLOAD

ACTIVITY	Hours	% To be attended
Theory classes	45,00	100
Laboratory practices	15,00	100
Attendance at events and external activities	2,00	0
Development of group work	12,00	0
Development of individual work	10,00	0
Study and independent work	18,00	0
Readings supplementary material	3,00	0
Preparation of evaluation activities	13,00	0
Preparing lectures	12,00	0
Preparation of practical classes and problem	18,00	0
Resolution of case studies	2,00	0
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## **TEACHING METHODOLOGY**

### LECTURES:

Lectures are based on an active methodology in which every 20/25 minutes an activity will be introduced requiring the students' intervention, so that: 1) they can immediately put into practice the contents that they have just learnt; 2) they regain the level of attention for next block of the lecture.

### 1) PREPARATION OF LECTURES:

Students will have to prepare the contents of the lectures following the planning of the course. They will use the bibliography suggested by the lecturer as well as the materials provided or the guidance given.

Students will be given activities to be completed at home individually or in groups and occasionally these activities will be needed for completing the following lecture. These activities may be evaluated before the lecture or during the lecture, as well as in hours of tutorial sessions.

The preparation of these activities at home will allow students to apply certain techniques such as the puzzle or other cooperative learning techniques.

#### 2) PREPARATION OF PRACTICAL WORK



To better assimilate the contents of the theoretical lectures, practical sessions will be held. Attendance at practical sessions is compulsory and shall be verified by the lecturer. Those students who cannot attend for work-related reasons should contact the lecturer before the beginning of the practical sessions. The results of these activities must be submitted to the lecturer in the terms set. Students will prepare part of these activities at home. <u>Attendance at practical sessions is compulsory</u>.

#### 3) TEAM WORK:

Throughout the course, a set of problems must be solved in teams of 3 to 6 people. Assessment of teamwork will take account of both group and individual marks.

#### 4) TUTORIALS:

a) Scheduled tutorials:

A few hours of scheduled tutorials will be set. In them, students will work in small groups on some of the most complex concepts which have already been presented in theoretical lectures. They will be given a series of activities/problems which will be solved with the help of the lecturer.

b) Non-scheduled tutorials:

A few hours of tutoring will be set every week for students to clarify concepts or questions arisen during the preparation of individual activities or group projects.

#### 5) SUPPLEMENTARY ACTIVITIES

There will be a seminar dealing with some of the topics discussed throughout the course.

## **EVALUATION**

The evaluation of the subject in the first summons will follow a scheme of continuous assessment. The following aspects will be considered:

- Written tests: there will be only one final written test of theoretical practical character. The minimum score a student must achieve to pass the course is 5 out of 10. The grade obtained in this test represent 50% of the final grade.
- Preparation of lectures, activities and problems that arise in the context of the lectures will have 15% of the final grade. All activities are mandatory for completion of the course evaluation at the first call.
- Practical work: The grade in this section represent 25% of the final grade. All practical work are required for completion of the course evaluation. The minimum score a student must achieve in this section to get an average with the other sections scores is 5 out of 10 points.
- Team work: In the evaluation of team work will be graded both the joint mark of the group as the individual mark of each member. The grade in this section represent 10% of the final grade. All supervised work in a team are required to conduct the evaluation of the subject at first call.



The composition of the final grade will follow, in summary, the following table:

- EXAM: 50%
- Preparation of lectures: 15,00%
- Practical work: 25,00%
- Team work: 10,00%
- TOTAL: 100 %

This assessment starts from the premise that teaching at the University of Valencia is, by definition, oncampus lecture delivery method. In this sense, the student should be aware that attendance at both the theoretical and practical lectures is essential for proper monitoring of the contents of the course. The student must also present the possibility to enroll part time when it is unable to attend all courses (60 credits). However, there is an exception for those students that justify it and for those students that request it. They have the possibility of being assessed without attending to all or part of the lectures. For these cases, students should proceed as follows:

- At the beginning of the course, student should inform to lecturer responsible for the course, the incidence that makes her/him unable to attend class. This must be adequately justified in documentary form.
- The lecturers in charge, in the light of this information will decide the possibility of evaluation without full or partial assistance to the lectures.

Students who are in this situation must submit for evaluation, all work required by the lecturer (not necessarily the same to those required for the course) and may also be called to defend them orally to the lecturer, and conduct a knowledge test. The weight of the final grade work will be 50% and the test the remaining 50% knowledge.

## REFERENCES

#### Basic

- Gestión Digital del la Información: De bits a bibliotecas digitales y la Web, R. Peña, R.Baeza, J. Rodríguez, Ed. RA-MA 2002.
- La biblioteca digital E. García Camarero, L.A. García, Ed. Arco/Libros, 2001
- Fundamentos de programación Web con HTML, XHTML y CSS, J. Duckett, Ed. Anaya Multimedia, 2008.
- XHTML y CSS Los nuevos estándares del código fuente, Luc Van Lancker, Segunda Edición, Eni Ediciones,2009
- Nuevas Tecnologias para Nuevas Bibliotecas, Jose Ángel Martínez Usero, Alfagrama Ediciones, 2007
- Los documentos electrónicos, Qúe son y cómo se tratan, Jordi Serra Serra, Ediciones Trea, 2008
- La fotografía digital en los archivos, Qué es y cómo se trata, David Iglesias Franch, Ediciones Trea,2008.



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- Técnicas de recuperación de Información, José Antonio Salvador Oliván, Jose María Angós Ullate
- Los mejores trucos para Internet, F. Charte Ojeda, Ed. Anaya 2009.

#### Additional

- El profesional de la Información http://www.elprofesionaldelainformacion.com
- The Oxford Guide to Library Research, T. Mann, Ed. Oxford University Press 2007
- Lenguajes de Marcas para la gestión de recursos digitales, E. BRUN, Ed. Trea, S.L.2008.
- Como Buscar en Internet, VV.AA, Ed. Aguilar, 2001.
- Las profundidades de Internet: accede a la información que los buscadores no encuentran y descubre el futuro inteligente de la red, I. Salazar, Ed. Trea S.L,2006
- Manual de HTML, desarrollado y mantenido por la Universidad de Valencia, http://sestud.uv.es/manual.esp
- Unleasing Web 2.0, from concepts to creativity, G. Vossen, S. Hagemann, Ed. Morgan Kaufmann, 2007.
- Online Retrieval: A Dialogue of Theory and Practice by G. Walker, J. Janes, C. Tenopir.

## ADDENDUM COVID-19

This addendum will only be activated if the health situation requires so and with the prior agreement of the Governing Council

#### SEMI-PRESENTIAL TEACHING

#### 1. Contents

The contents initially included in the teaching guide are maintained

#### 2. Workload and time schedule

The activities and their hours of dedication in ECTS credits marked in the original Course Guide will be kept.

Theoretical classes will be developed online and practical classes will have a 100% attendance. Teaching planning will be specified at the beginning of the term.

If the sanitary situation changes and no access to the University facilities is possible, all teaching activities will be carried out completely online. In this case, the adaptations will be communicated to the students through the Virtual classroom.

#### 3. Teaching Methodology



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Online theoretical classes through the Blackboard Collaborate or Teams platforms that can be complemented with different types of materials and activities in the Virtual classroom.

Face-to-face practical classes.

Some face-to-face sessions will be planned.

Tutorials will be done online (through the UV corporate mail) or face-to-face by prior appointment with the teacher.

If the sanitary situation changes and no access to the University facilities is possible, teaching and tutorials will be carried out completely online. In this case, the adaptations will be communicated to the students through the Virtual classroom.

#### 4. Evaluation

The evaluation criteria established in the teaching guide are not maintained. Specifically, the evaluation percentages specified in the original teaching guide and the minimum mark of the final exam for the subject are varied. The percentages that vary are:

40% Written test. It is necessary to obtain a 4 out of 10 to average with the other parts and pass the course.

20% Teamwork.

The percentages that are maintained are:

15% Preparation of theoretical classes

25% Practical work. It is also maintained, getting a 5 out of 10 to average with the rest of the sections.

If the University facilities were closed on the dates set in the official calendar for the final exam, the faceto-face exam will be replaced by an online test.

#### 5. Bibliographic references

The recommended bibliography in the Course Guide is kept. If the sanitary situation changes and the access to the recommended bibliography is not possible, it will be replaced by materials accessible online.