VNIVERSITAT Đ VALÈNCIA

# COURSE DATA

| Data Subject | |
|---|---|
| **Code** | 33838 |
| **Name** | Information Architecture on the Web |
| **Cycle** | Grade |
| **ECTS Credits** | 6.0 |
| **Academic year** | 2022 - 2023 |

| Study (s) | | | |
|---|---|---|---|
| **Degree** | **Center** | **Acad. year** | **Period** |
| 1007 - Degree in Information and Documentation | Faculty of Geography and History | 2 | Second term |

| Subject-matter | | |
|---|---|---|
| **Degree** | **Subject-matter** | **Character** |
| 1007 - Degree in Information and Documentation | 5 - Representation and retrieval of information | Obligatory |

| Coordination | |
|---|---|
| **Name** | **Department** |
| GONZALBO GOMEZ, JOSEP ANGEL | 240 - Computer Science |

# SUMMARY

The Information Architecture on the Web (AIW) is the discipline that is responsible for structuring, organizing and labeling the elements that make up the informational environments of websites, to facilitate the location and understanding of the information contained in them and thus improve the user experience.

This course will introduce students to AIW concepts and practical techniques for the analysis and design phases of a web project, emphasizing the tests and evaluation methods of user.

# PREVIOUS KNOWLEDGE

## Relationship to other subjects of the same degree

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

## Other requirements

No enrollment restrictions with other subjects of the curriculum.

# 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.

- Know a foreign language.

- Have skills for information management.

- Have problem-solving skills.

- Have decision-making capacity.

- Be able to apply critical reasoning to the analysis and assessment of alternatives.

- Be able to undertake improvements and propose innovations.

- Know the national and international legal and administrative framework for information management, and apply the legal and regulatory provisions and procedures relating to the information and documentation activity.

- Have skills for creating and applying documentary languages in information systems.

- Be able to use and put into practice methods, techniques and computer tools (hardware or software) for the design, implementation, development and operation of information systems.

- Understand, design and apply models for data and information representation, and mechanisms for data extraction and exploitation and for information retrieval.

- Know, use and apply information and communication technologies applied to the storage, use, management, handling, distribution and exploitation of data, information and knowledge.

- Know, use and apply the computer and telecommunications tools that support the development of the set of skills that must be acquired in the training process.

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# LEARNING OUTCOMES

On successful completion of this subject students will be able to:

1. Know the basic principles of information on websites and mobile applications as well as the associated standards.
2. Understand and analyze the structural and functional elements that make up the information architecture (AI) of a website or mobile application: organization, tagging, navigation and search systems.
3. Develop user-centered evaluation techniques that guide the development of AI in the analysis and design phases of a web project or a mobile application.
4. Audit information architectures of websites and mobile applications to develop proposals that improve the user experience and their positioning and relevance and authority.
5. Develop the analysis and design phases of a website or mobile application.

# DESCRIPTION OF CONTENTS

## 1. Fundamentals of Web architecture

This part defines the source, evolution and historical context of the discipline, and defines basic concepts.

Lesson 1. Introduction and basic concepts.
a)Discipline definition.
b)Role of the information architect.
c)User experience. User-oriented design.
d)Anatomy of IA: usability, navigability, accessibility, infor-mation needs, strategies.
e)Users: Needs and behaviors.

## 2. Fundamentals of web architecture design

This part analyzes the fundamentals of web information systems: organization, labelling, navigation and search. Moreover, criteria based on these principles will be developed to analyze systems from a critical point of view and to improve web architectures already implemented.

Lesson 2. Organization systems
a)Organization of web information systems
b)Organization schemes
c)Organization structures
d)Development of organization systems

Lesson 3. Labelling systems
a)Importance and usefulness of labelling systems
b)Types of labelling systems

c)Keys in the development of labeling systems
d)Card Sorting

Lesson 4. Navigation systems
a)Navigation systems
b)Goals
c)Types of navigation systems
d)Design of navigation systems

Lesson 5. Search systems
a)Search systems
b)Tpes of search systems
c)The internal search engine of the website
d)External search engines: Google
e)Website improvement in search results

## WORKLOAD

| ACTIVITY | Hours | % To be attended |
|---|---|---|
| Theory classes | 37,50 | 100 |
| Laboratory practices | 22,50 | 100 |
| Attendance at events and external activities | 2,00 | 0 |
| Development of group work | 10,00 | 0 |
| Development of individual work | 10,00 | 0 |
| Study and independent work | 18,00 | 0 |
| Readings supplementary material | 8,00 | 0 |
| Preparation of evaluation activities | 16,00 | 0 |
| Preparing lectures | 8,00 | 0 |
| Preparation of practical classes and problem | 8,00 | 0 |
| Resolution of case studies | 10,00 | 0 |
| **TOTAL** | **150,00** | |

## TEACHING METHODOLOGY

**FACE-TO-FACE CLASSES:**

Face-to-face classes are based on expository lessons in which the lecturer describes theoretical aspects. The material for each session will be available for the students 1 week before each class, so that they have time to prepare the lesson before attending. Moreover, in face-to-face classes some time will be devoted to correcting the exercises proposed. Solutions to the exercises will only be presented on the board in class and will not be distributed digitally.

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## PRACTICAL EXERCISES:

At the end of each face-to-face class, the lecturer will propose some practical exercises to be completed individually as homework. These exercises are oriented to practicing the concepts introduced in the lectures and to contextualizing the content of the subject. These exercises will be corrected in face-to-face lessons, leaving at least 1 week to complete them. These exercises must be submitted to the lecturer throughout the course according to the deadlines and terms specified.

## WORK IN GROUPS

At the beginning of the course, groups of 3 members will be defined. These groups will work collaboratively during the lessons and outside the classroom. Group projects must be submitted throughout the course. Given that this subject involves making critical analyses, the groups are encouraged to compare their results.

## LABORATORY PRACTICE

The theory concepts explained in class will be put into practice in laboratory sessions, in which the lecturer will help the students in a personalized way. Students will have access to the practical exercise 1 week before the beginning of each session. Attendance to laboratory sessions is mandatory and the lecturer will monitor attendance. Laboratory exercises must be submitted throughout the course according to the schedule and the terms specified by the lecturer.

## TUTORIALS:

Non-scheduled tutorials: There are several hours of tutoring during which students can clarify concepts, make questions or ask for guidance to prepare their group project.

| Group | Lecturer | Tutoring hours |
|---|---|---|
| Theory + Lab 1 | Josep Gonzalbo Gómez josep.gonzalbo@uv.es | Web and Marketing Unit Burjassot Campus |

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Scheduled tutorials: At the beginning of the course, a number of tutorials will be scheduled. These will be used to explain how to prepare the group project. Also, any question regarding theory contents or practical problems can be asked during these tutorials.

**SUPPLEMENTARY ACTIVITIES:**

A supplementary seminar will be offered to cover in more detail some of the topics studied in the subject. The seminar will last 2 hours and 30 minutes with theory and practice. Later on, students will have to prepare a report on the topic discussed in the seminar.

# EVALUATION

1. Written test: only one written test will be held including theoretical and practical issues. Students must obtain at least 5 points out of 10 to pass the subject. The mark obtained in this part is worth 40% of the final mark.
2. Theory exercises: the activities proposed in the lectures account for 10% of the final mark. The mark for all the exercises is calculated as the average of all the exercises proposed. The minimum average mark must be 5 points out of 10. Otherwise, the final mark of the exercises will be FAIL.
3. Practical exercises: the mark obtained in this section accounts for 40% of the final mark and is calculated as the average mark of all the practical exercises, only if all the exercises have been completed and there is a minimum mark of 5 in each one. Otherwise, the final mark will be FAILED.
4. Group project: the mark for this part is based on individual and collective marks (within the same group). The mark obtained in this section accounts for 10% of the final mark and is calculated considering the group presentation and the report submitted. If students fail to submit a group project, the final mark for the subject will be FAILED.
5. The final mark will be calculated individually by adding the marks obtained in each part, as long as each mark is at least 5 out of 10. The weight for each part is described in the next table.

| | |
|---|---|
| Written test | 40 % |
| Theory exercises | 10 % |
| Practical exercises | 40 % |
| Group project | 10 % |
| **TOTAL** | 100 % |

If the written test is not made (independently of the other parts), the final mark will be NON-PRESENTED.

Every assessable part of the subject can be presented in first or in convocation. Between convocations, parts with more than 5 are saved.

Theory, practice and group exercises will be checked with Urkund to look for plagiarism. Assignments with detected plagiarisms will score 0 for all the students involved.

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 of the subject. Students must also bear in mind the possibility of part-time enrollments 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 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.

## REFERENCES

### Basic

- ROSENFELD, L.; and MORVILLE, P. Information Architecture for the World Wide Web. O'Reilly & Associates, Inc. Sebastopol, CA, USA, 2002. Suscrito en versión electrónica: http://proquestcombo.safaribooksonline.com/0596527349

PÉREZ-MONTORO, GUTIÉRREZ, M.; Arquitectura de información en entornos Web. Ed. Trea, 2010

KRUG, S. Dont make Me Think. New Riders Publ., 2000.

GARRET, J. ; The Elements of User Experience : User-Centered Design for the Web and Beyond. New Riders Publ., 2011.

NIELSEN, J.; Designing Web Usability. Prentice Hall, 2000

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## Additional

- CAMUS, J.C. Tienes 5 segundos. Edición electrónica: https://ir.uv.es/0LxUNV2

HASSAN MONTERO, Y.; Experiencia de Usuario: Principios y Métodos. Edición electrónica: https://yusef.es/Experiencia_de_Usuario.pdf

MORDECKI, D.; Miro y entiendo: Guía práctica de Usabilidad web. Edición electrónica: http://www.mordecki.com/html/miroyentiendo.php