Teaching guide

IDENTIFICATION DETAILS

Degree:	Architecture
Scope	Architecture, construction, building and urban planning, and civil engineering
Faculty/School:	Higher Polytechnic School
Course:	INFORMATION TECHNOLOGY II
Type:	Basic Training
ECTS credits:	6
Year:	2
Code:	3727
Teaching period:	Fourth semester
Subject:	Computing
Module:	Propaedeutical
Teaching type:	Classroom-based
Language:	Spanish
Total number of student study hours:	150

SUBJECT DESCRIPTION

This course is developed in continuity with the previous course and focuses on two topics that are fundamental to professional practice: the management of project documents and the development of infographics.
During the course, various applications are resumed, deepened and expanded. But it's not about performing mechanical processes. Through the proposed strategies, students must customize their own method of representation.
To articulate this process, the course takes as a reference various graphic strategies of 20th and 21st century architecture that the student must observe, interpret and select in an appropriate way.

The most important step has already been taken: to provoke concern to know, to continue researching and moving forward. This fact is shared by all first-year architecture subjects. However, the second course, in addition to

insisting on this fact (which should not cease during the exercise of the profession), will try to involve the student in a dynamic of refinement of tools, methods and strategies for approaching the representation of spaces, projects and ideas of architecture.
Using a teaching scheme similar to that of the first course, the methods for solving the proposed exercises will emerge from the generation of new needs. This will help the student to understand the learning process and method in which they are immersed, discovering that in the difficulties caused by the improvement and use of new tools, there are new possibilities and strategies that help to think and communicate.
The progressive learning of computer tools depends on a solid gradual establishment of basic knowledge, in relation to the programs and the way to link them, as well as on their precise use and their aspects of application.

GOAL

Present architectural project spaces using graphic documents that allow us to understand how it is built and what the main ideas are.

PRIOR KNOWLEDGE

It is advisable to have passed the subjects of Descriptive Geometry, Technical Drawing and Computer Science I. The student should be familiar with three-dimensional modeling in Rhinoceros and with Photoshop.

COURSE SYLLABUS

1. Management and general organization of three-dimensional models.
2. Definition and scale in three-dimensional models applied to Architecture.
3. The light, texture and gravity of three-dimensional environments using 'rendering' engines.
4. Advanced effects on virtual architecture images.

EDUCATION ACTIVITIES

1. In-person activities.
1.1. Expository classes: Presentation of content and activities by the teacher, commentary, recommended reading, and with the participation of students in the debate and resolution of doubts about the topics proposed in class.
1.2. Carrying out exercises: Solve, individually, on the blackboard or on the table exercises proposed in class to apply the fundamental knowledge received.
1.3. Project workshop: Correction in groups of different sizes of the projects that students carry out in the classroom or at home, and they clarify in the light of the exercises of their classmates and the instructions of their teachers.
1.4. Evaluation: Carrying out knowledge assimilation checks throughout the course and with the greatest possible continuity.
1.5. Mentoring:
1.5.1. Personalized: Individual attention to the student with the objective of reviewing and discussing the topics presented in class and clarifying doubts that the student cannot understand in their personal study.
1.5.2. Group: Attention to a small group of students who need additional help to follow the subject.

2. Non-face-to-face activities.
2.1. Theoretical and practical study: Study of the theoretical and practical contents of the program and preparation of recommended readings.
2.2. Group work: Group design and development of works.

DISTRIBUTION OF WORK TIME

TEACHER-LED TRAINING ACTIVITIES	INDIVIDUAL WORK
60 Horas	90 Horas

SKILLS

Basic Skills

Students must have demonstrated knowledge and understanding in an area of study that is founded on general secondary education. Moreover, the area of study is typically at a level that includes certain aspects implying knowledge at the forefront of its field of study, albeit supported by advanced textbooks

Students must be able to apply their knowledge to their work or vocation in a professional manner and possess skills that can typically be demonstrated by coming up with and sustaining arguments and solving problems within their field of study.

Students must have the ability to gather and interpret relevant data (usually within their field of study) in order to make judgments that include reflections on pertinent social, scientific or ethical issues

Students must be able to convey information, ideas, problems and solutions to both an expert and non-expert audience

Students must have developed the learning skills needed to undertake further study with a high degree of independence

Ability to solve problems and to take decisions.

Ability to apply procedures.

General Skills

Ability to solve problems and to take decisions.

Ability to apply procedures.

Specific skills

Appropriate and applied knowledge to architecture and urban planning of spatial representation systems.

Appropriate and applied knowledge to architecture and urban planning of the analysis and theory of form and the laws of visual perception.

Appropriate and applied knowledge to architecture and urban planning of graphic survey techniques in all its phases, from drawing notes to scientific restitution.

LEARNING RESULTS

Represent building perspectives with the language of a model made with common materials, using tools for virtual simulation of scenarios using three-dimensional environments.

Represent an external perspective of a building using virtual scenario simulation tools using three-dimensional environments.

Represent an interior perspective of a building using virtual scenario simulation tools using three-dimensional environments.

Develop an immersion experience in a three-dimensional environment, using 3D glasses.

LEARNING APPRAISAL SYSTEM

A. EVALUATION IN AN ORDINARY CALL
This course is based on continuous evaluation. Periodically, an exercise will be carried out in relation to the contents of the course. To pass the subject per course, it will be mandatory to submit all the exercises on time. The exercises will be graded from 0 to 10 and general corrections will be made on a regular basis. In addition, the following should be considered:
A.1. CRITERIA FOR APPROVING
The student will pass per course if: - Attend at least 80% of the classes. - Submit the course exercises on the date and time indicated. To pass per course, ALL internships must be submitted. A work is considered delivered when it meets all the format requirements (paper and digital) indicated in the statement. All exercises will be delivered in the corresponding CANVAS task. Suspended internships can be compensated with others that are approved, since the average prevails. - You get an average rating of 5 to 10 for such jobs. Papers submitted after the deadline will be graded with a maximum score of 5. The distribution of ratings will be as follows:
-- E1 'Virtual Mockups' > 25%
-- E2 'Imitating photographs' > 40%
-- E3 'Project Images' > 35%
A.2. QUALIFICATION CRITERIA AND JOB IMPROVEMENTS
No work can be improved after the delivery date. Any improvement can be made by TEACHING, CORRECTING AND ATTENDING OTHER CORRECTIONS during the course of the practice through classes and tutoring. Any note made in class about one student's work will affect the rest; therefore, it will not be necessary to repeat to each student what should be improved if such improvements are repeatedly exposed in the context of public correction. Students with internships delivered will NOT be able to deliver improvements. The qualification of the internships will be subject to evaluation criteria, which the student will know in advance in the statements. The corrections of the papers before delivery will respond to the steps that the student must take, which may vary depending on where their work is located.
B. EVALUATION IN AN EXTRAORDINARY CALL
Students who do not pass the course or do not complete it will be eligible for an exam in the extraordinary call. To carry out this exam, it will be necessary to submit ALL the exercises of the course, which will be evaluated on the same criteria set out in the statements.
Clarification: Plagiarism, as well as the use of illegitimate means in evaluation tests, will be sanctioned in accordance with those established in the Evaluation Regulations and the University's Coexistence Regulations.

ETHICAL AND RESPONSIBLE USE OF ARTIFICIAL INTELLIGENCE

1.- The use of any Artificial Intelligence (AI) system or service shall be determined by the lecturer, and may only be used in the manner and under the conditions indicated by them. In all cases, its use must comply with the following principles:
a) The use of AI systems or services must be accompanied by critical reflection on the part of the student regarding their impact and/or limitations in the development of the assigned task or project.
b) The selection of AI systems or services must be justified, explaining their advantages over other tools or methods of obtaining information. The chosen model and the version of AI used must be described in as much detail as possible.
c) The student must appropriately cite the use of AI systems or services, specifying the parts of the work where they were used and describing the creative process followed. The use of citation formats and usage examples may be

consulted on the Library website(https://www.ufv.es/gestion-de-la-informacion_biblioteca/).
d) The results obtained through AI systems or services must always be verified. As the author, the student is responsible for their work and for the legitimacy of the sources used.
2.- In all cases, the use of AI systems or services must always respect the principles of responsible and ethical use upheld by the university, as outlined in the Guide for the Responsible Use of Artificial Intelligence in Studies at UFV. Additionally, the lecturer may request other types of individual commitments from the student when deemed necessary.
3.- Without prejudice to the above, in cases of doubt regarding the ethical and responsible use of any AI system or service, the lecturer may require an oral presentation of any assignment or partial submission. This oral evaluation shall take precedence over any other form of assessment outlined in the Teaching Guide. In this oral defense, the student must demonstrate knowledge of the subject, justify their decisions, and explain the development of their work.

BIBLIOGRAPHY AND OTHER RESOURCES

Basic

Chaos Group Learning Resources 2023 [https://www.chaos.com/es/resources]