Universidad Zaragoza

29985 - Creativity in project presentations

Información del Plan Docente

Academic Year	2016/17
Academic center	110 - Escuela de Ingeniería y Arquitectura
Degree	436 - Bachelor's Degree in Industrial Engineering Technology
	438 - Bachelor's Degree in Telecomunications Technology and Services Engineering
	440 - Bachelor's Degree in Electronic and Automatic Engineering
	430 - Bachelor's Degree in Electrical Engineering
	470 - Bachelor's Degree in Architecture Studies
	558 - Bachelor's Degree in Industrial Design and Product Development Engineering
	434 - Bachelor's Degree in Mechanical Engineering
	476 -
	435 - Bachelor's Degree in Chemical Engineering
	439 - Bachelor's Degree in Informatics Engineering
ECTS	4.0
Course	XX
Period	Half-yearly
Subject Type	Optional
Module	---

1.Basic info

1.1.Recommendations to take this course

General university student academic profile.
Recommended to all students of B achelor's Degree.

1.2.Activities and key dates for the course

The subject has FOUR conceptual blocks:

- The first deals with the basics of exposure and general considerations to develop a compelling or adapted to the receiver and support information to present expositional script. TRENDS and effective platforms for public exhibition of projects of engineering or architecture magazines or techical journals.
- The second section analyzes the presentation, structure, methods of adapting to scripts and contents. components of graphic design and multimedia are also studied to obtain optimal performances. specific software tools are reviewed to work in environments connectivity with smartphones.
- The third review aspects related to the efficient documentary exhibition of scientific or technical data by graphical diagrams and more complex compositions. This discipline is called infographics.
- Finally, the fourth block studies EXPOSITORY technics using digital 3D models and mockups and its application within the project in technical engineering or architecture.

They have established themselves SIX STUDENT TASK of each stage of the cycle referred to above. The review of techniques and tasks deriving are integrated with theoretical blocks chronologically. (See schedule)

2.Initiation

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2.1.Learning outcomes that define the subject

The student, for passing this subject, should demonstrate the following results ...

* Mastering key concepts related to the design , development and public exposure computer presentations or academic content .
* Know different techniques for selection , handling and improving own visual elements of such work .
* Develop more effective , understandable, and to promote the sharing or progress of the ideas in these presentations.
* C reativity level to stand out in a competitive and global context resources.

2.2.Introduction

This course reviews different innovative, technological and visual resources that can used in the public presentation of an engineering or architecture project. The course looks at different solutions for planning, designing and making computer based PRESENTATIONS. Next-generation mobile platforms in collaborative work environment are analyzed.

The matter affects creative tools for making complex graphs or diagrams that present scientific or technical information more convenient to produce publications, posters or user manuals (INFOGRAPHIC).
They practice with various software applications for visual thinking and solutions that reconstruct or complement 3D reality on mobile phones.
The general contents of the subject are practical and integrated into a systematic and consistent work that can be applied to a real project immediately.

3.Context and competences

3.1.Goals

The subject and its expected results meet the following approaches and objectives:
1. SUPPLEMENT formal education with a matter of general utility, eminently cross application use .
2. Provide students RESOURCES immediately applicable in their working environment , professional or further research .

3. Encourage the use of language / VISUAL THINKING exposure in technical project or scientific publication.
4. Enhancing creativity from the new media technology and exposure resources.

3.2.Context and meaning of the subject in the degree

This subject is a tool for further training within the overall context of the new degrees. It is aimed at students of technical or scientific PROFILE. The main objective of the course is to enhance the skills and operational capacity of the student, improving their progression within the professiomal work, research or the public or private sector through the use of optimal expository methodology.

3.3.Competences

To pass the course, students will be more competent to ...

- Present the results of their work more efficiently.
- Ganing konwledge about visual resources to be used in a presentation
- How to use the most appropriate presentation, depending on the audience.
- Emerging media of communication and new methods of collaborative work.
- INNOVATE at various stages of the project in engineering or architecture.

3.4.Importance of learning outcomes

This course aims to fill a gap in the matter in the formation of the students of the EINA. This shortcoming is evident during public presentations regardless of other resources or related to the individual skills. This is an innovative material based on the need to apply emerging technologies and new media. Adds value, not redundant, to any of the academic profiles taught therein. Updated, optimized and expanded training content for the new academic model. It fits mainstreaming training, particularly in our Campus Rio Ebro.

4.Evaluation

The student must demonstrate that it has achieved the intended learning outcomes through the following evaluation activities

OPTION A: Continuous assessment.

* REVIEW CASE STUDY RESOLVED BY TASK: Students must complete six tasks integrated a particular case. These tasks determine the understanding of the subject by students and the ability to apply learning and a subject chosen by him and supervised by teachers. Account for 75% of the total score.
* Exposure of project or CASE RESOLVED: Collects and adapts the above tasks for public exhibition in digital platform support on selected education (MOODLE). This phase allows pooling of individual initiative of each student. It is 25% of the grade.
OPTION B. Test.

For those students who want this option or not exceeding the minimum qualification in the form of continuous assessment, a written test that consign 100% of qualifying to celebrate in the exam schedule established by the EINA will take place.

5.Activities and resources

5.1.General methodological presentation

The learning process that is designed for this subject is based on the following: It is a practical subject and uses rational resources .It encourages the use of tools accessible to a college student oriented real case studies professional engineer or architect analysis. Increases its ability to integrate into a productive system and / or company. Individual work is the core of the activities but the goal is the active dissemination of the results with the participation of other partners.

5.2.Learning activities
- **CONVENTIONAL CLASS** (12 hours): The fundamental contents of the subject are presented. This activity will take place in the classroom using presentation software, creative applications offline and online via Internet connection.
- **EXERCISES** (CASE STUDY EXAMPLE)(24 hours): Practical sessions in which similar to those required of the student to be evaluated tasks are presented. specific visual software platform installed on the student's personal computer (laptop) in classrooms conditioned for it with WiFi and under the guidance of Professor used.
- **TUTORING:** Tutoring will be carried out throughout the course both in person at the scheduled time or via e-mail or direct coordination through MOODLE 2.
- **WORK EXPOSURE** (04 hours): Collection and assembly tasks resolved in academic platform MOODLE or on the Internet using available free resources.
- **Individual work** : It is estimated at 80 hours.

- **TEST** (01 hours):For those students who want this option or not exceeding the minimum qualification in the form of continuous assessment, a written test that consign 100% of qualifying to celebrate in the exam schedule established by the EINA will take place.

5.3.Program

The program that the student is offered to help you achieve the expected results includes the following activities ...

CONCEPTUAL BLOCKS:

- BL01: Creativity tools in mobile media. Project presentation on the Web. Principles to develop attractive content. Screenplay and history.
- BL02: Presentation tools and software. Structure and possibilities. Graphic design for presentations. Layouts and graphic mockups. Design with guys in mobile environments. creative for image processing techniques. Screencasting techniques.
- BL03: Visual thinking. Mantal maps, diagrams and pictograms. Infographics for the presentation of scientific or technical data.
- BL04: Digital models and prototypes manufacturing in office. Display products, components and environments for creative presentations. Virtual reality and augmented reality on mobile devices

CASE STUDY:

- PR01: Storytelling. Using a smartphone to make a brief description of the curriculum or presentation of an idea.
- PR02: Making an overall layout for a presentation.
- PR03: Application of mental maps ("mindmap") for a SCAMPER analysis of an idea, a product or a project using various graphic design tools on smartphone.
- PR04: Creating an infographic data visualization with various visual metaphors.
- PR05: Development of a digital model.
- PR06: Development of a general exhibition techniques 3D video to be displayed on a video server animation internet. (YouTube, Vimeo, etc).

5.4.Planning and scheduling

Week:	Conceptual block:	Case study:	WORK exposition/Others:
01	**BL01(02)**		**Subject presentation (01)**
02	**BL01(01)**	**PR01(02)**	
03	**BL01(01)**	**PR01(02)**	
04	**BL02(01)**	**PR02(02)**	
05	**BL02(01)**	**PR02(02)**	
06	**BL02(01)**	**PR03(02)**	

07	**BL02(01)**	**PR03(02)**	
08	**BL03(01)**	**PR04(02)**	
09	**BL03(01)**	**PR04(02)**	
10	**BL03(01)**	**PR05(02)**	
11	**BL03(01)**	**PR05(02)**	
12	**BL04(01)**	**PR06(02)**	
13	**BL04(01)**	**PR06(02)**	
14	**BL04 (01)**		**EXP01 (02)**
15	**BL04(01)**		**EXP02 (02)**

(Hours planned)

5.5.Bibliography and recomended resources

- Reynolds, Garr: " Presentation Zen " Springer, New Riders; 2 edition (December 18, 2011) ISBN-10: 0321811984

- Krun, Randy: " Cool Infographics " Wiley; 1 edition (October 28, 2013) 368 pp. ISBN-13: 978-1118582305

- Carter, Matt: " Designing Science Presentations: A Visual Guide to Figures, Papers, Slides, Posters, and More " Academic Press; 1 edition (February 27, 2013) 384 pp.ISBN-13: 978-0123859693