[GIF206] INTERACTIVE GRAPHIC SYSTEMS LABORATORY

GENERAL INFORMATION

Studies	DEGREE IN COMPUTER ENGINEERING			**Subject**	PROGRAMMING
Semester	2	**Course**	3	**Mention / Field of specialisation**	
Character	OPTIONAL				
Plan	2017	**Modality**	Adapted Face-to-face	**Language**	EUSKARA
Credits	4,5	**Hours/week**	3.75	**Total hours**	67.5 class hours + 45 non-class hours = **112.5 total hours**

PROFESSORS

SERRADILLA CASADO, OSCAR

REQUIRED PREVIOUS KNOWLEDGE

Subjects	Knowledge
(No specific previous subjects required)	*(No previous knowledge required)*

SKILLS

VERIFICA SKILLS

SPECIFIC

GIE103 - To be able to design appropriate solutions in one or more application contexts, using software engineering methods which integrate ethical, social, legal and financial aspects.

GENERAL

GIGC07 - To have the knowledge, understanding and ability to apply the laws pertaining to Computer Technology Engineering and manage specifications, standards and regulations of mandatory compliance.

GIGC12 - To understand and apply the fundamentals of economics and human resource management, project planning and organisation, legal and regulatory frameworks and standardisation in computer technology projects

BASIC

G_CB2 - To be able to apply knowledge to occupational or professional tasks; have the necessary skills to pose and defend arguments, and to solve problems within their field of study

G_CB4 - To be able to communicate information, ideas, problems and solutions to both expert and lay audiences

G_CB5 - To have developed learning abilities required to embark on subsequent studies with a high level of autonomy.

LEARNING RESULTS

RGI338 **[!]** ***Sabe utilizar frameworks para el diseño de interfaces gráficos***

LEARNING ACTIVITIES	CH	NCH	TH
Practices of problem solving and real or simulated context projects	24 h.	16 h.	40 h.
Presentation of the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	12 h.	8 h.	20 h.

EVALUATION SYSTEM	W
Reports of solving exercises, case studies, computer practices, simulation practices and laboratory practices **Comments:** Minimum grade: 5	100%

MAKE-UP MECHANISMS

Reports of solving exercises, case studies, computer practices, simulation practices and laboratory practices

Comments: Students with less than 5 in the practice must retake the exam. Practice value will be 25% and retake 75%.

CH - Class hours: 36 h.
NCH - Non-class hours: 24 h.
TH - Total hours: 60 h.

RGI339 **[!]** ***Sabe diseñar un sistema de interacción hombre máquina integrando tecnologías diferentes.***

LEARNING ACTIVITIES	CH	NCH	TH
Practices of problem solving and real or simulated context projects	19,5 h.	13 h.	32,5 h.
Presentation of the teacher in the classroom, in participatory classes, of concepts and procedures associated with the subjects	12 h.	8 h.	20 h.

EVALUATION SYSTEM	W	MAKE-UP MECHANISMS
Reports of solving exercises, case studies, computer practices, simulation practices and laboratory practices **Comments:** Minimum grade: 5	100%	Reports of solving exercises, case studies, computer practices, simulation practices and laboratory practices **Comments:** Students with less than 5 in the practice must retake the exam. Practice value will be 25% and retake 75%.

CH - Class hours: 31,5 h.
NCH - Non-class hours: 21 h.
TH - Total hours: 52,5 h.

CONTENTS

1. Introduction
   - Presentation of the subject
   - Objetives
   - Evaluation
   - Theory about AR

2. Frameworks
   - Unity
   - Vuforia Engine
   - Vuforia Studio
   - Android Studio

3. Properties
   - Object types
     - 3d
     - Multimedia
   - Object properties
   - Simple interaction with objects
   - Animations

4. Advanced properties
   - Complex interaction with objects
   - Interaction of objects
   - Interactive virtual elements
   - Cloud

5. Vuforia Target
   - Image Target
   - Multi Target
   - Cloud Target

LEARNING RESOURCES AND BIBLIOGRAPHY

Learning resources	Bibliography
Subject notes Topic related web quires Moodle Platform	http://katalogoa.mondragon.edu/janium-bin/janium_login_opac_re_lnk.pl?grupo=INFORMATICA32&ejecuta=20&