804242 - GAM - Gamification

Coordinating unit: 804 - CITM - Image Processing and Multimedia Technology Centre
Teaching unit: 804 - CITM - Image Processing and Multimedia Technology Centre
Academic year: 2017
Degree: BACHELOR’S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Teaching unit Compulsory)
BACHELOR’S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Teaching unit Compulsory)
ECTS credits: 6
Teaching languages: Catalan, Spanish, English

Teaching staff
Coordinator: Juan José Fábregas Ruesgas
Others: Roger Montserrat Ribes; del Castillo Figueruelo, Arantzazu

Degree competences to which the subject contributes

Specific:
CEVJ 4. (ENG) Identificar y emplear mecánicas y dinámicas de juego en entornos no lúdicos con la finalidad de potenciar la motivación, la concentración, el esfuerzo y la fidelidad en sectores muy diversos como la educación, el marketing, la empresa y la salud o el deporte.

Transversal:
04 COE N2. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 2. Using strategies for preparing and giving oral presentations. Writing texts and documents whose content is coherent, well structured and free of spelling and grammatical errors.
05 TEQ N2. TEAMWORK - Level 2. Contributing to the consolidation of a team by planning targets and working efficiently to favor communication, task assignment and cohesion.
06 URI N2. EFFECTIVE USE OF INFORMATION RESOURCES. Managing the acquisition, structure, analysis and display of information from the own field of specialization. Taking a critical stance with regard to the results obtained.
07 AAT N2. SELF-DIRECTED LEARNING - Level 2: Completing set tasks based on the guidelines set by lecturers. Devoting the time needed to complete each task, including personal contributions and expanding on the recommended information sources.

Teaching methodology
The teacher will present the contents and the supplies and study materials needed for the study or the implementation of the practices. In this part of the subject, students can participate, normally by doing questions about the contents presented by the teacher and by taking notes.
Participatory session in which students can actively intervene by asking doubts related with the studied contents and by doing a cooperative revision of the practices with the teacher.
Development of the practices during the sessions and, also autonomously from the instructions given by teachers.
Throughout the course there will be two different practices.
Case study. The teacher will explain a case. Cases describe a problem and give some information. Students must analyze the case, reflect on and discuss about them to find solutions.

Learning objectives of the subject
- Understand the concept of gamification and the techniques of gamification applied in different fields and be able to design a gamification process in a specific context.
- Implement strategies to prepare and perform oral presentations and write texts and documents with coherent content,
appropriate structure and style, and good level of spelling and grammar.
- Contribute to consolidate the team by planning objectives, working efficiently and promoting the communication, the appropriate distribution of the tasks and the cohesion.
- Identify the distinct parts of an academic document and organize the references. Design and perform an advanced search strategy with specialized resources of information and select the proper information with relevance and quantity criteria being in mind.
- Perform the assigned tasks with the basic instructions given by the teachers, deciding the time each task require to be completed, including personal contributions, and extending the sources of information indicated.

### Study load

<table>
<thead>
<tr>
<th>Total learning time: 150h</th>
<th>Hours large group: 18h</th>
<th>12.00%</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group: 30h</td>
<td>20.00%</td>
</tr>
<tr>
<td></td>
<td>Hours small group: 0h</td>
<td>0.00%</td>
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<tr>
<td></td>
<td>Guided activities: 12h</td>
<td>8.00%</td>
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<tr>
<td></td>
<td>Self study: 90h</td>
<td>60.00%</td>
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### Content

| Gamification. Basic notions. | **Learning time:** 5h  
|                            | Theory classes: 2h  
|                            | Self study: 3h |
| **Description:** | Interpretation and definition, history, uses and real examples cases. |
| **Related activities:** | Practices 1 and 2 |

| Psychology of Motivation and Gamification | **Learning time:** 3h 30m  
|                                         | Theory classes: 1h  
|                                         | Guided activities: 1h  
|                                         | Self study: 1h 30m |
| **Description:** | Description of the most relevant aspects of psychological theories about motivation that serve as a basis to gamification. |
| **Related activities:** | Practices 1 and 2 |

| Understanding the concept of game. | **Learning time:** 2h  
|                                   | Theory classes: 1h  
|                                   | Guided activities: 1h |
| **Description:** | Gamification in context, differences between serious games, games, gameful design and playful design.  
|                 | Differentiation with videogames. Philosophical vision of a game and applications in contexts of business. Kind of players and games in contexts. |

| Operant Conditioning. | **Learning time:** 5h  
|                      | Theory classes: 2h  
|                      | Self study: 3h |
| **Description:** | Operant conditioning. Analysis of its implementation in gamification. Ethical issues. |
| **Related activities:** | Practices 1 i 2. Case Study 1. |
# Game elements.

<table>
<thead>
<tr>
<th>Description</th>
<th>Related activities</th>
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## Self-Determination Theory.

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<tr>
<th>Description</th>
<th>Related activities</th>
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</table>

## Designing the Gamification and design decisions.

<table>
<thead>
<tr>
<th>Description</th>
<th>Related activities</th>
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<tbody>
<tr>
<td>Process of design, definition of the objectives and behaviors. Kinds of players and their courses of activity. Tips to Get more engagement. Design decisions, balance and validation of our gamification. Design according to specific groups. Creative resources available.</td>
<td>Practices 1 and 2</td>
</tr>
</tbody>
</table>

## Learning time:

- **Game elements.** 7h  
  - Theory classes: 2h  
  - Guided activities: 2h  
  - Self study: 3h

- **Self-Determination Theory.** 5h  
  - Theory classes: 2h  
  - Self study: 3h

- **Designing the Gamification and design decisions.** 7h  
  - Theory classes: 2h  
  - Guided activities: 2h  
  - Self study: 3h
### Social Cognitive Theory

**Learning time:** 5h  
**Description:** Social Cognitive Theory.  
**Related activities:** Practices 1 and 2. Case Study 1.

### Gamification at work and according to sectors.

**Learning time:** 5h  
**Description:** Implementation of gamification in enterprises according to its sector. Improve the motivation in the workplace. Dynamics of game vs dynamics of work. Understanding the concept of playbor.  
**Related activities:**  

### Flow Theory.

**Learning time:** 7h  
**Description:** Flow Theory. Analysis of its implementation to gamification.  
**Related activities:** Prácticas 1 y 2. Estudio de Caso 4.

### Practical analysis of a gamified App.

**Learning time:** 5h  
**Description:** Analysis of a gamified App. Identification of the business objectives, the target audience and the main motivators for these audience. Deconstruction of the gamification elements and optimization of the gamification.  
**Related activities:** Practice 1.
## Virtual Economies and Metagames

| Description: | Introduction to the most expanded virtual economies. Review of the principal existing systems of monetization. Integration of virtual goods and virtual currencies with our gamified experience and metagame. |
| Related activities: | Practices 1 and 2. |

| Learning time: | 5h |
| Theory classes: | 2h |
| Self study: | 3h |

## Good Practices, legal risks and bad practices

| Description: | Example cases of good practices in gamification, dangers and examples of bad practices in gamification. |
| Related activities: | Practices 1 and 2. |

| Learning time: | 2h 30m |
| Theory classes: | 1h |
| Self study: | 1h 30m |

## KPIs: Metrics and analysis of the gamification

| Description: | Introduction to the main KPI's, measurement methods and implementation in gamification to validate its performance in a business context. |

| Learning time: | 5h |
| Theory classes: | 2h |
| Guided activities: | 1h 30m |
| Self study: | 1h 30m |
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Qualification system

Practices.
- Practice 1, 10% worthing of final grade.
- Practice 2, 10% worthing of final grade.
Test exams.
Tests average, 10% worthing of final grade.
Case Study, 10% worthing of final grade.
Mid-term exam.
- 1 mid-term exam, 25% worthing of final grade.
Final exam.
- 1 final exam, 25% worthing of final grade.

Participation and student learning attitude, 10% worthing of final grade.

Suspended students can reach for the re-evaluation, no matter the final grade obtained (There is no minimum grade to access, if and when the grade is different from NP). The grade obtained in the re-evaluation replaces, if it is higher of the grade obtained in the continuous evaluation, except for the participation and learning attitude. The final grade of the course, calculated from the re-evaluation exam, can not exceed 5.

Bibliography

Basic:

Werbach, Kevin. How game thinking can revolutionize your business.
Burke Brian. G A M I F Y.
Zichermann, Gabe. Mastering Gamification.
Zichermann, Gabe; Linder, Joselin. Game-based marketing.
Zichermann, Gabe; Cunningham, Christopher. Gamification by design.
Martín, Imma. Gamificación.
Rigby, Scott. Glued to Games: How to Video Games draw us un and hold us spellboud.
H. Pink, Daniel. Frive, The surprising thruth about what motivates us.