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.
804242 - GAM - Gamification

- 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:</th>
<th>18h</th>
<th>12.00%</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hours medium group:</td>
<td>30h</td>
<td>20.00%</td>
</tr>
<tr>
<td></td>
<td>Hours small group:</td>
<td>0h</td>
<td>0.00%</td>
</tr>
<tr>
<td></td>
<td>Guided activities:</td>
<td>12h</td>
<td>8.00%</td>
</tr>
<tr>
<td></td>
<td>Self study:</td>
<td>90h</td>
<td>60.00%</td>
</tr>
</tbody>
</table>
## 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:**

**Related activities:**
Practices 1 i 2. Case Study 1.
### Game elements.

**Learning time:** 7h  
- Theory classes: 2h  
- Guided activities: 2h  
- Self study: 3h

**Description:**  
Game Thinking technics, think as a Game Designer, implement the rules of design, measure the emotions and the entertainment factors. Decomposition, hierarchical organization and pyramid of the elements. Development of PBL triangle and its limitations. Deconstruction of a memorable experience. Creative available resources.

**Related activities:**  
Practices 1 and 2.

### Self-Determination Theory.

**Learning time:** 5h  
- Theory classes: 2h  
- Self study: 3h

**Description:**  
Self-Determination Theory. Analysis of its implementation in gamification.

**Related activities:**  
Practices 1 and 2. Case Study 3.

### Designing the Gamification and design decisions.

**Learning time:** 7h  
- Theory classes: 2h  
- Guided activities: 2h  
- Self study: 3h

**Description:**  
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.

**Related activities:**  
Practices 1 and 2.
### Social Cognitive Theory

<table>
<thead>
<tr>
<th><strong>Description:</strong></th>
<th><strong>Learning time:</strong> 5h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Cognitive Theory.</td>
<td>Theory classes: 2h</td>
</tr>
<tr>
<td></td>
<td>Self study: 3h</td>
</tr>
</tbody>
</table>

**Related activities:** Practices 1 and 2. Case Study 1.

### Gamification at work and according to sectors.

<table>
<thead>
<tr>
<th><strong>Description:</strong></th>
<th><strong>Learning time:</strong> 5h</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Theory classes: 2h</td>
</tr>
<tr>
<td></td>
<td>Self study: 3h</td>
</tr>
</tbody>
</table>

**Related activities:** Practices 1 and 2.

### Flow Theory.

<table>
<thead>
<tr>
<th><strong>Description:</strong></th>
<th><strong>Learning time:</strong> 7h</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flow Theory. Analysis of its implementation to gamification.</td>
<td>Theory classes: 4h</td>
</tr>
<tr>
<td></td>
<td>Self study: 3h</td>
</tr>
</tbody>
</table>

**Related activities:** Prácticas 1 y 2. Estudio de Caso 4.

### Practical analysis of a gamified App.

<table>
<thead>
<tr>
<th><strong>Description:</strong></th>
<th><strong>Learning time:</strong> 5h</th>
</tr>
</thead>
<tbody>
<tr>
<td>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.</td>
<td>Theory classes: 2h</td>
</tr>
<tr>
<td></td>
<td>Self study: 3h</td>
</tr>
</tbody>
</table>

**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
Práctica 1.

**Description:**
Identifica los objetivos de negocio de la organización que ha implementado técnicas de gamificación en alguna de las apps sugeridas en la práctica. Justifica y razona los principales comportamientos que la organización pretende modificar en los usuarios de su app gamificada y porque se ha optado por utilizar técnicas de gamificación. Analiza el player journey en la experiencia gamificada, justifica su estructura, etapas, ciclos de actividad del usuario, progresión completa y flow. Justifica las principales estrategias implementadas en los motivadores, emociones y tipo de diversión que ofrece a los usuarios de la app. Deconstruye y clásifica por componentes, mecánicas y dinámicas todo el proceso de gamificación y analiza las dependencias funcionales con la app. Razona que estrategias SDL o PENS se han llevado a cabo en toda la experiencia gamificada.

**Support materials:**
- Apuntes de la asignatura.
- Herramientas:
  - Gamification Canvas Model de Sergio Jimenez.
- Papers:
  - From Game Design Elements to Gamefulness Defining Gamification? (Sebastian Deterding; Dan Dixon; Rilla Khaled; Lennart Nacke)
  - Behavioral game design by John Hopson (Gamasutra)
  - The Player experience of Need Satisfaction by Scott Rigby and Richard Ryan (PENS)
  - Motivation during Videogame Play: Analysing Player Experience in terms of Cognitive Action

**Descriptions of the assignments due and their relation to the assessment:**
Documento de análisis de una app Gamificada estructurado con pantallas adjuntas relativas al análisis.

**Specific objectives:**
Desarrollar la capacidad de análisis de una experiencia gamificada aplicada a una APP con objetivos principalmente de negocio que implementa diversos de elementos y estrategias de gamificación. El ejercicio pretende familiarizar al alumno con la identificación y reconocimiento de las estructuras que componen un proceso de gamificación, sus dependencias a nivel de negocio y como influyen en el diseño completo de una aplicación.

Práctica 2.

**Description:**
Basándose en un contexto de videojuego causal para móvil con un modelo de negocio principalmente freemium se deberá documentar y diseñar un prototipo interactivo que presente las principales dinámicas del metajuego y la gamificación. El videojuego casual deberá implementar de forma coherente un metajuego que favorezca la retención y fidelización de sus jugadores. Dicho metajuego tendrá que incorporar mecánicas de gamificación correctamente interrelacionadas tanto con la microeconomía virtual como con la experiencia principal del videojuego.

**Hours:** 13h 45m
- Guided activities: 5h 30m
- Self study: 8h 15m
Case Study 1 to 4

| Hours: 22h 30m |
| Guided activities: 9h |
| Self study: 13h 30m |

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.

Support materials:
Herramientas:
- Game Design Lenses Card Deck by Jesse Schell
- SCVNGR's Secret Game Mechanics Playdeck by Zynga
- Deconstructor for fun BLOG by Michail Katkoff.

Descriptions of the assignments due and their relation to the assessment:
- Plan de gamificación, esquema de metajuego con ?core-loop? y dependencias con el modelo de negocio del videojuego. Prototipo navegable del metajuego y su gamificación.

Specific objectives:
- Ser capaz de abstraer los elementos clave de la experiencia de un videojuego y combinar técnicas de gamificación que cooperen con el metajuego del videojuego. Comprender las dependencias existentes del metajuego, la gamificación y el game design con el modelo de negocio freemium de un videojuego casual para móviles.
Bibliography

Basic:


Zichermann, Gabe. Mastering gamification.


