804348 - GDES-A - Game Design

Coordinating unit: 804 - CITM - Image Processing and Multimedia Technology Centre
Teaching unit: 804 - CITM - Image Processing and Multimedia Technology Centre
Academic year: 2019
Degree: BACHELOR'S DEGREE IN DESIGN, ANIMATION AND DIGITAL ART (Syllabus 2017). (Teaching unit Optional)
ECTS credits: 6

Teaching languages: Catalan

Teaching staff
Coordinator: Boira Ricart, Oriol

Degree competences to which the subject contributes

Specific:
CEAAD 3. (ENG) Dominar el gran abanico de herramientas profesionales del sector para la elaboración de contenidos digitales de todo tipo.

Transversal:
03 TLG. THIRD LANGUAGE. Learning a third language, preferably English, to a degree of oral and written fluency that fits in with the future needs of the graduates of each course.
04 COE. EFFICIENT ORAL AND WRITTEN COMMUNICATION. Communicating verbally and in writing about learning outcomes, thought-building and decision-making. Taking part in debates about issues related to the own field of specialization.
05 TEQ. TEAMWORK. Being able to work as a team player, either as a member or as a leader. Contributing to projects pragmatically and responsibly, by reaching commitments in accordance to the resources that are available.
06 URI. 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. SELF-DIRECTED LEARNING. Detecting gaps in one's knowledge and overcoming them through critical self-appraisal. Choosing the best path for broadening one's knowledge.

Teaching methodology

Class sessions are divided into two bands of activity:
1. Descriptive part, in which the teacher explains new content, describes work materials, and answers questions from students.
2. Participatory part, in which students work, explain and discuss the exercises.

Learning objectives of the subject

(ENG)
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### Study Load

<table>
<thead>
<tr>
<th>Hours</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large group</td>
<td>24h</td>
<td>16.00%</td>
</tr>
<tr>
<td>Medium group</td>
<td>22h</td>
<td>14.67%</td>
</tr>
<tr>
<td>Small group</td>
<td>0h</td>
<td>0.00%</td>
</tr>
<tr>
<td>Guided activities</td>
<td>14h</td>
<td>9.33%</td>
</tr>
<tr>
<td>Self study</td>
<td>90h</td>
<td>60.00%</td>
</tr>
</tbody>
</table>

**Total learning time:** 150h
## Content

<table>
<thead>
<tr>
<th>Introduction to Game Design</th>
<th>Learning time: 10h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 4h</td>
</tr>
<tr>
<td></td>
<td>Self study: 6h</td>
</tr>
</tbody>
</table>

### Description:
1. The Game Design discipline
2. The role of game designer
3. The creation process
4. Our strategy to create playful quality

### Related activities:
Research on the discipline, the process of creating and concepts related to quality.

### Specific objectives:
Put into context the discipline, the office, and work processes and learning.

<table>
<thead>
<tr>
<th>Game elements and framework</th>
<th>Learning time: 10h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 4h</td>
</tr>
<tr>
<td></td>
<td>Self study: 6h</td>
</tr>
</tbody>
</table>

### Description:
1. Formal and abstract systems
2. Game elements
3. Frameworks
4. MDA framework

### Related activities:
Identification and classification of game elements.

### Specific objectives:
Recognize and analyze elements of play and meet and fall into designer frames.
### Game Mechanics

**Description:**
1. Main mechanics
2. Rules
3. Particular mechanics
4. Connected mechanics
5. Mechanics and controls
6. Mechanics and player
7. Contingences
8. Sequence of events

**Related activities:**
Analysis of different types of mechanics.
Creation and justification of mechanics.
Relationships between mechanics and other game elements.

**Specific objectives:**
Recognize, analyze, create and link game mechanics to create gameplay.

<table>
<thead>
<tr>
<th>Learning time</th>
<th>Theory classes: 12h</th>
<th>Self study: 18h</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Goals, rewards and modifiers</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Description:**
1. Goals
2. Rewards
3. Triangulation
4. Modifiers
5. Time
6. Randomness, probability and uncertainty

**Related activities:**
Identification, analysis and classification of goals, rewards and modifiers.
Creating proposals and integration with playable contexts.

**Specific objectives:**
Recognize, analyze, create and relate starting pace.
### The player

<table>
<thead>
<tr>
<th></th>
<th><strong>Learning time:</strong> 20h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 8h</td>
</tr>
<tr>
<td></td>
<td>Self study: 12h</td>
</tr>
</tbody>
</table>

**Description:**
1. Different experiences for different people
2. Inherent to human condition
3. Consubstantial to culture
4. Learning and progression
5. Self-Determination Theory
6. Perception of welfare and happiness levels
7. Brain, emotion, behaviors
8. Survival, pleasure, pain
9. Mental models
10. Patterns
11. Bartle Test, User Types Hexad, Big Five Model

**Related activities:**
Identifying motivator elements and their corresponding feedback with people. Identifying and creating activity patterns. Relations with different personality traits.

**Specific objectives:**
 Knowing the characteristics of the players to optimize gaming systems.

### Dynamics and game flow

<table>
<thead>
<tr>
<th></th>
<th><strong>Learning time:</strong> 30h</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Theory classes: 12h</td>
</tr>
<tr>
<td></td>
<td>Self study: 18h</td>
</tr>
</tbody>
</table>

**Description:**
1. Magic circle
2. Play as activity in time
3. Situations, decisions and actions
4. Fun
5. Game Flow
6. Game Loops
7. Curves of interest
8. Behaviors by conditioning
9. Motivation elements
10. Handling errors
11. Dynamics with objects
12. Puzzles

**Related activities:**
Analysis and creation of situations, decisions and actions. Analysis and creation of activity flow and fun. Creating puzzles and integration with playable contexts.

**Specific objectives:**
Recognize, analyze, create and dynamic linking.
### Aesthetics and game-player communication

**Learning time:** 20h  
Theory classes: 8h  
Self study: 12h

**Description:**
1. Perception and neuroscience  
2. Conceptual communication  
3. Ludology and narratology  
4. Linearity and non-linearity  
5. Conditioning by environment  
6. Characters' roles

**Related activities:**
Analysis of proposals and their integration with mechanics, concept and narrative.  
Creating proposals, responding to criteria of content and gameplay.

**Specific objectives:**
Recognize, analyze, create and relate aesthetic elements for optimum game-player communication.

### Strategy, documentation and communication

**Learning time:** 10h  
Theory classes: 4h  
Self study: 6h

**Description:**
1. Creation and communication strategy  
2. Traditional Game Design Document vs Wiki format

**Related activities:**
Creating a strategy and design document GDD.

**Specific objectives:**
Recognize, analyze and create strategies creation and documentation.
### SESSION EXERCISES

**Description:**
In this kind of exercises the student makes analysis or creates being based on the theoretical aspects that has learned, and also makes a document with his analysis or creation.

**Support materials:**
- Statement sheets.
- Explanations and resources given during the sessions.

**Descriptions of the assignments due and their relation to the assessment:**
- Document deliveries in e-campus.

**Specific objectives:**
Analysis, investigation, and critical comprehension.

<table>
<thead>
<tr>
<th>Hours</th>
<th>Theory classes:</th>
<th>Self study:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5h</td>
<td>2h</td>
<td>3h</td>
</tr>
</tbody>
</table>

### GAME JAMS

**Description:**
In this exercises the student creates depending on specific contingences.

**Support materials:**
- Statement sheets.
- Explanations and resources given in the sessions.

**Descriptions of the assignments due and their relation to the assessment:**
- Documents in the e-campus.

**Specific objectives:**
Creation and documentation.

<table>
<thead>
<tr>
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<th>Self study:</th>
</tr>
</thead>
<tbody>
<tr>
<td>10h</td>
<td>4h</td>
<td>6h</td>
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</tbody>
</table>

### GAME DESIGN DOCUMENT

**Description:**
The student creates a Game Design Document with the formalization of a proposal.

**Support materials:**
- Statement sheet.
- Explanations and resources given in the sessions.

**Descriptions of the assignments due and their relation to the assessment:**
- Documents by e-campus.

**Specific objectives:**
Research, creativity and consistency of the proposals.

<table>
<thead>
<tr>
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<th>Self study:</th>
</tr>
</thead>
<tbody>
<tr>
<td>20h</td>
<td>8h</td>
<td>12h</td>
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</tbody>
</table>
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**Qualification system**

1. Exercises in each session. The sum of all will be a weighting of 20% of the grade for the course.
2. Practice, in "Jam" format. It will represent 25% of the grade for the course.
3. A final project. It will represent the 45% of the grade for the course.
4. The assessment of student participation in the training activities of matter, and learning attitude will be evaluated by monitoring their interventions. This assessment corresponds to 10% of the final grade.

**Regulations for carrying out activities**

- Part of the exercises can be done in class with the subject teacher. Students must also devote time to self-employment (after hours) to complete the exercises.
- The exercises, once completed, must be returned to the Virtual Campus in the corresponding delivery and date thereof, shall be taken into account in assessing those delivered before 24 hours of the deadline.
- The evaluation of the exercises involves not only the judgment of the case, also it means the defense made of the results and the realization of relevant documents.
- Any incidents that do not help solve the exercise in the indicated time must be previously communicated to the teacher. Following this communication and depending on the causes for failure to submit the exercise, if justified, alternatives were found to complete the assessment. Also they consider justified reasons for non-submission of the exercises communicated to management studies.
- The documents must be completed following the instructions, especially regarding file names. Proper management of the documentation is an aspect of desirable skills and part of the evaluation.

**Bibliography**

**Basic:**


**Complementary:**


**Others resources:**

- www.gamasutra.com
- www.gamecareerguide.com
- www.gamesindustry.com
- www.meristation.com