

Course Unit	Visual Effects	Field of study	Visual Arts/Computing Science
Bachelor in	Game Design	School	School of Public Management, Communication and Tourism
Academic Year	2017/2018	Year of study	3
Type	Semestral	Semester	1
Workload (hours)	162	Contact hours	T - , TP 15, PL 45, TC - , S - , E - , OT - , O -
		Level	1-3
		ECTS credits	6.0
		Code	8309-414-3103-00-17

T - Lectures; TP - Lectures and problem-solving; PL - Problem-solving, project or laboratory; TC - Fieldwork; S - Seminar; E - Placement; OT - Tutorial; O - Other

Name(s) of lecturer(s) Jose Pedro de Sousa Teixeira

### Learning outcomes and competences

At the end of the course unit the learner is expected to be able to:

1. Develop the capacity of using software of visual effects to enhance the visuality of a digital game;
2. Acquire multidisciplinary competences (2D Animation, 3D Animation color correction, etc. . ), to build cutting-edge visual effects;
3. Understanding and analyzing different examples of (film, television and digital games) good practices in visual effects;
4. Understand coordination between the visual effects and sound effects;
5. Develop every production stage of a scene (digital games) to apply visual effects;
6. Know the history of visual effects.

### Prerequisites

Before the course unit the learner is expected to be able to:  
Basic notions of Adobe Photoshop CS5, Blender, Adobe Premiere CC and Adobe After Effects CC.

### Course contents

Theory and history of visual effects; Preproduction of Visual Effects; Workflow in the production set; Postproduction of Visual Effects; Advanced software technics for creating Visual Effects: Adobe Photoshop, Adobe After Effects and others;

### Course contents (extended version)

1. The theory and history of visual effects:
  - Evolution of used techniques in the production of visual and special effects.
  - Deconstruction of reference works already made by analyzing the whole production process.
2. Preproduction of visual effects:
  - Argument breakdown;
  - Storyboards;
  - Animatics;
  - Previews;
3. Workflow on production set:
  - Elements and techniques for visual effects production. Digital and analog materials.
4. Postproduction of visual effects:
  - Workflow and planning;
  - Integration of production contents;
  - Digital compositing: história, literacy, composition and visual manipulation for visual effects.
5. Advanced software skills for visual effects creation(Adobe Photoshop, Adobe After Effects, etc. ):
  - Matte Painting;
  - Roto Brushing and Motion Tracking;
  - 3D compositions in visual effects;
  - Color Grading e Color Correction;
  - Expressions in Adobe After Effects;

### Recommended reading

1. Mattingly, D. (2011). The Digital Matte Painting Handbook. Indianapolis, Indiana: Wiley Publishing Inc. ISBN: 9780470922422
2. Okun, J. & Zwerman, S. (2010). The VES Handbook of Visual Effects. Abingdon, Oxon: Focal Press. ISBN: 9780240812427
3. Meyer, C & Meyer, T. (2010). Creating Motion Graphics with After Effects: Essential and Advanced Techniques. Abingdon, Oxon: Focal Press. ISBN: 9780240814155
4. Adobe Creative Team. (2013). Adobe After Effects CC Classroom in a Book. Berkeley, CA: Adobe Press. ISBN: 9780321929600
5. Van Hurkman, A. (2011). Color Correction Handbook: Professional Techniques for Video and Cinema. Berkeley, CA: Peachpit Press. ISBN: 9780321713117

### Teaching and learning methods

Expositive method, by the transmission of knowledge in a structured and continued way; Interrogative method, questioning the students systematically in order to develop critical capacity; Demonstrative method with practical application by students; Active method with exercise resolution, in order to allow better consolidation of knowledge.

### Assessment methods

- Distributed Evaluation (Interns and Erasmus) - (Regular, Student Worker) (Final, Supplementary, Special)
  - Projects - 5% ("Color Correction" individual component.)
  - Projects - 5% ("Matte Painting" individual component.)
  - Projects - 40% ("Logo Animation" and "Logo Animation 3D" group component.)
  - Projects - 20% ("Motion Tracking / 3D" individual component.)
  - Projects - 30% (Final Composition - group project.)

### Language of instruction

Portuguese, with additional English support for foreign students.

## Electronic validation

Jose Pedro de Sousa Teixeira	Daniel Ribas de Almeida	Vítor José Domingues Mendonça	Luisa Margarida Barata Lopes
24-10-2017	09-12-2017	11-12-2017	19-12-2017