

Basic Animation

Code: 104743
ECTS Credits: 6

Degree	Type	Year	Semester
2503873 Interactive Communication	OB	2	2

Contact

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Use of Languages

Principal working language: catalan (cat)
Some groups entirely in English: No
Some groups entirely in Catalan: Yes
Some groups entirely in Spanish: No

Prerequisites

There are no prerequisites.

Objectives and Contextualisation

To know:

L'evolució tecnològica de les tècniques de creació d'animació.
The theoretical principles of audiovisual animation.
The complexity of the production process of a piece of animation.
The importance of the different phases that intervene before starting to animate.
The practical applications and expressive possibilities of animation.
To conceive and produce an audiovisual piece using some of the animation techniques.

Competences

- Act with ethical responsibility and respect for fundamental rights and duties, diversity and democratic values.
- Act within one's own area of knowledge, evaluating sex/gender-based inequalities.
- Associate mathematical and physical processes and theories, and their application to the world of databases, with the creation of interfaces and with augmented virtual reality.
- Devise, create, activate and integrate virtual and augmented-reality spaces, characters and objects.
- Introduce changes in the methods and processes of the field of knowledge to provide innovative responses to the needs and demands of society.
- Manage time efficiently and plan for short-, medium- and long-term tasks.
- Search for, select and rank any type of source and document that is useful for creating messages, academic papers, presentations, etc.
- Students must be capable of applying their knowledge to their work or vocation in a professional way and they should have building arguments and problem resolution skills within their area of study.
- Students must have and understand knowledge of an area of study built on the basis of general secondary education, and while it relies on some advanced textbooks it also includes some aspects coming from the forefront of its field of study.

Learning Outcomes

1. Analyse a situation and identify its points for improvement.
2. Analyse the sex-/gender-based inequalities and gender bias in one's own area of knowledge.
3. Animate characters in 2D and 3D, beginning with manual methods and eventually using the most sophisticated software in existence.
4. Apply the concepts of physics and mathematics to create and animate credible characters.
5. Communicate using language that is not sexist or discriminatory.
6. Consider how gender stereotypes and roles impinge on the exercise of the profession.
7. Cross-check information to establish its veracity, using evaluation criteria.
8. Distinguish the salient features in all types of documents within the subject.
9. Find what is substantial and relevant in documents of all types on the fundamental principles of animation.
10. Identify situations in which a change or improvement is needed.
11. Plan and conduct academic studies on animation for the virtual world.
12. Propose new methods or well-founded alternative solutions.
13. Propose new ways to measure the success or failure of the implementation of innovative proposals or ideas.
14. Propose projects and actions that are in accordance with the principles of ethical responsibility and respect for fundamental rights and obligations, diversity and democratic values.
15. Propose projects and actions that incorporate the gender perspective.
16. Show expertise in shot composition and character creation, and in the techniques of facial animation.
17. Students can apply the knowledge to their own work or vocation in a professional manner and have the powers generally demonstrated by preparing and defending arguments and solving problems within their area of study.
18. Submit course assignments on time, showing the individual and/or group planning involved.
19. Weigh up the risks and opportunities of both one's own and other people's proposals for improvement.

Content

Topic 1. Introduction to animation

- Introduction to animation
- Optical games
- Animation principles
- Basic vocabulary
- Motion generators: ("pose to pose", "pixilation", "stop-motion" and rotoscoping/motion capture)

Topic 2. The conception

- The creation process, from the idea to the broadcast copy.
- Comparison between the different techniques.
- Common processes and differential elements.

Topic 3. Techniques

- Techniques
- Introduction to the tools (software).

Topic 4. Production models

- Optimal organizational model of an animation production.
- Different practical organizational models of the producers.
- American and Japanese production
- European product
- Service structures: Asian models.

Topic 5. Pre-production

- Idea-argument-script.
- Story-board (different models).

- Animation
- The creation of the characters (model sheets).
- The definition of the environments.
- The Concept Art.
- The Animatic/leica reel.
- The scenery layouts.
- The animation layouts.
- The shooting cards.

Topic 6. The production

- The direction of the animation.
- Animation (2D and 3D)
- Assisting (2D).
- Int/Clean-up (2D).
- Ink&Paint (2D).
- Compositing.

Topic 7. Pre-production

- Editing/editing.
- Sound editing and mixing.
- Final copy.

Topic 8. The sound editing

- The soundtrack:
- The music to the animated drawing.
- Methodology of work.
- The locutions: prerecording vs. recording.
- The effects.
- The mixes.

Methodology

The theoretical sessions are complemented by other practical sessions.

The detailed calendar with the content of the different sessions will be displayed on the day of the presentation of the course.

the course. It will also be posted on the Virtual Campus where students will be able to find a detailed description of the exercises and

exercises and practices, the different teaching materials and any other information necessary for an adequate follow up of the course.

the course. In case of change of teaching modality due to health reasons, the teaching staff will inform of the will inform of the changes that will take place in the programming of the course and in the teaching methodologies.

Once these sessions have been given, the students, in pairs or groups (depending on the number of students groups (depending on the number of students enrolled) will develop an animation, lasting at least 1 minute, The teachers will follow up the production by means of obligatory tutorials to guide them during the course of the elaboration of the

of the elaboration of the short film. In these tutorials, where evaluable material will be presented, the students will have to

material requested by the professors in order to verify the correct development of the short film and to be able to

of the short film and to be able to solve the problems that arise as well as to assess the production.

Annotation: Within the schedule set by the centre or degree programme, 15 minutes of one class will be reserved for students to evaluate their lecturers and their courses or modules through questionnaires.

Activities

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Laboratory internships	33	1.32	3, 4, 7, 8, 16, 11, 18, 9
Theoretical sessions	19.5	0.78	7, 8, 11, 9
seminaries	0	0	
Type: Supervised			
Tutorials	7.5	0.3	7, 8, 11, 18, 9
Type: Autonomous			
Creation of an animation piece of at least one minute.	60	2.4	3, 4, 7, 8, 16, 11, 18, 9
Preparation of presentation	11	0.44	4, 7, 8, 11, 18
Viewing of recommended material	11	0.44	7, 8, 9

Assessment

1) The assessment of the course will be carried out through the presentation of different audiovisual pieces that cover different parts of the production process.

different parts of the production process and in which different techniques will be used.

2) Throughout the course, there will be several obligatory deliveries of practical work (animations and material that is

material referring to the production processes of audiovisual works such as story-board, animation, concept art, etc.),

animatic, concept art...)

3) The partial deliveries that can be assessed will be: - Animation (5%) - Pixilation projects (5%) and Stop Motion (10%). It is valued the organization of the project / guide / pre-production / storyboard / animation / animation / post-production (edit/audio). An mp4 with the production and the documents of the project will be required - Motion Graphics project (10%) consisting of the animation of a cinegraph or a multi-photograph - Motion Graphics project (10%) consisting of the animation of a cinegraph or a multi-photograph - Motion Graphics project (10%) consisting of the animation of a cinegraph or a multi-photograph.

The final assessable deliverables will be the Final Project, combining the knowledge acquired, choosing between motion graphics, pixilation, rotoscoping or stop motion or combining techniques (30%) and presentation of the project (15%). The organisation of the project / guide / pre-production / storyboard / animation / animation / post-production (edit/audio) will be assessed.

The presentation of the project makes up 15% of the final mark.

4) 10% of the final mark will be determined by class attendance and participation.

Reassessment:

Depending on the results obtained between the exercises/practicals and the group work, there will be a new exercise in order to re-evaluate the aspects not passed. This re-evaluation will take place on the dates set out in the academic calendar.

In the event that the student performs any irregularity that may lead to a significant variation of an evaluation act, this evaluation act will be graded with 0, regardless of the disciplinary process that could be instructed. In the event, that several irregularities occur in the evaluation acts of the same subject, the final grade for this subject will be 0.

Assessment Activities

Title	Weighting	Hours	ECTS	Learning Outcomes
Class participation	10%	0	0	4, 5, 7, 8, 11, 15
Final deliveries (Prectical work)	45%	2	0.08	1, 3, 4, 7, 16, 11, 18, 12, 17, 9
Partial deliveries (works)	30%	4	0.16	2, 3, 4, 5, 7, 8, 16, 10, 11, 18, 14, 15, 17, 9, 6
Project delivery	15%	2	0.08	2, 3, 4, 5, 7, 8, 16, 11, 19, 18, 12, 13, 14, 15, 9, 6

Bibliography

Bendazzi, Giannalberto 2003. Cartoons: 110 años de cine de animación. Ocho y Medio. Madrid.

Delgado, Pedro Eugenio 2000. El cine de animación. Ediciones JC, DL. Madrid.

Lord, Peter; Sibley, Brian 1998. Cracking Animation. The Aardman Book of 3-D Animation. Thames & Hudson.

MacLean, Fraser 2011. Setting the Scene. The Art and Evolution of Animation Layout. Chronicle Books, San Francisco.

COMPLEMENTÀRIA:

Bakedano, José J. 1987. Norman McLaren. Obra completa. 1932-1985. Museo de Bellas Artes. Bilbao.

Levitan, Eli L. 1980. Generación electrónica de imágenes. Ediciones Bellaterra, S.A. Barcelona.

Mealing, Stuart 1992. The Art and Science of Computer Animation. Intellect Books. Oxford.

Rondolino, Gianni 1974. Storia del cinema d'animazione. Giulio Einaudi editore s. p. a., Torino.

Solomon, Charles: 1994. Enchanted Drawings. The History of Animation. Wings Books. New York.

Vivar Zurita, Hipólito 1988. La imagen animada: Análisis de la forma y del contenido del dibujo animado.

Editorial de la Universidad Complutense. Madrid.

Software

- Da Vinci Resolve

- Softwares Stop Motion
- Affinity Photo
- Masterclass Adobe After Effects