

Basic Character Modelling

Code: 104758
ECTS Credits: 6

Degree	Type	Year	Semester
2503873 Interactive Communication	OT	4	1

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

Other comments on languages

During the course there are terms and concepts expressed in English, as well as part of the software to be used

Prerequisites

It is necessary to have taken the subject of Advanced Animation or to have basic knowledge of 3D editing software.

Objectives and Contextualisation

We will focus on the process of character creation: from conceptualization, basic design, modeling of a physical model and the transition to a digital environment.

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.
- Apply and integrate knowledge in the fields of social sciences, humanities and engineering to generate complex products and services tailored to citizens' needs.
- Devise, create, activate and integrate virtual and augmented-reality spaces, characters and objects.
- Display the ability to lead, negotiate and work in a team.
- 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 be capable of communicating information, ideas, problems and solutions to both specialised and non-specialised audiences.

- Students must develop the necessary learning skills to undertake further training with a high degree of autonomy.
- 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. Communicate using language that is not sexist or discriminatory.
3. Create animated characters that are expressive and of high aesthetic quality.
4. Cross-check information to establish its veracity, using evaluation criteria.
5. Design objects that combine aesthetic norms with perfect technical functionality.
6. Distinguish the salient features in all types of documents within the subject.
7. Form part of groups working on virtual-production projects.
8. Identify the specific features of the design, creation, integration and animation of digital objects (2D and 3D) and specific tools from both a conceptual and a practical perspective.
9. Interpret and discuss documents on the main theories on virtual environments.
10. Master the techniques of character modelling.
11. Plan and execute academic projects in the field of virtual environment theory.
12. Present a summary of the studies made, orally and in writing.
13. Propose new methods or well-founded alternative solutions.
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 operating the relevant computer programmes.
17. Submit course assignments on time, showing the individual and/or group planning involved.
18. Weigh up the risks and opportunities of both one's own and other people's proposals for improvement.

Content

Anatomy

- Basic proportions and shapes
- Muscle and bone groups
- Expression, movement and forms

The language of forms

- Action and movement
- Expression

Character design

- 2D design
- Physical model

3D modeling

- Basic modeling
- Secondary elements
- Details

Shading

- Color palette
- Textures
- Lighting

Rigging

- Basic skeleton
- Pose and attitude

Methodology

The pivot theme of the subject will be the creation of a character.

Students will have to deliver multiple exercises distributed in the different stages of the creative process.

We will introduce related concepts through the analysis of case studies.

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 practices	33	1.32	16, 10
Master classes with practical exercises	15	0.6	8
Type: Supervised			
Evaluation	3	0.12	17
Type: Autonomous			
Practical exercise	38	1.52	
Tutorships (individual or group face-to-face activity aimed at solving learning problems)	10	0.4	1, 13

Assessment

The evaluation will be distributed as follows:

- Class attendance and participation (20%)
- Individual practical exercises (30%)
- Individual final project (50%)

In order to evaluate the final project, it is mandatory to submit all the practical exercises within the indicated terms and conditions.

In order to be able to assess the practical exercises, it is necessary to attend and participate in class (except for specific cases with justified major causes).

The final project will be the creation of a 3D character following the creative and technical process practiced in class.

Revaluation

Students will be entitled to the reevaluation of the subject if they have been evaluated from the set of activities whose weight is equivalent to a minimum of 2/3 of the total grade of the subject.

In order to be able to present the recovery of the subject, it will have been necessary to obtain the average mark of 3.5.

The activities that are excluded from the recovery process are the individual practical exercises.

Plagiarism

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 attendance and participation	20%	15	0.6	1, 2, 4, 6, 12, 8, 9, 13, 15
Individual practical exercises	30%	33	1.32	1, 16, 10, 8, 11, 18, 17, 13, 14
Individual practical final project	50%	3	0.12	3, 5, 7, 17

Bibliography

[The Animator's survival kit / Richard Williams](#)

Williams, Richard, 1933-2009

https://bibcercador.uab.cat/permalink/34CSUC_UAB/avjcib/alma991001433279706709

During the course, complementary bibliography will be recommended according to the syllabus.

Software

We will use the open-source 3D editing software "Blender" (<https://www.blender.org>)