

Basic Character Modelling

Code: 104758
ECTS Credits: 6

2024/2025

Degree	Type	Year
2503873 Interactive Communication	OT	4

Contact

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Teaching groups languages

You can view this information at the [end](#) of this document.

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

Activities and Methodology

Title	Hours	ECTS	Learning Outcomes
Type: Directed			
Laboratory practices	33	1.32	10, 16
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

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.

Assessment

Continous Assessment Activities

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

Assessment This course does not include a single assessment system.

The assessment will be distributed as follows:

- Class attendance and participation (20%)

- Individual practical exercises (30%)
- Final project (50%)

The final project will be developed throughout the semester and will be presented in an oral presentation.

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

Each component (final project, practical exercises, and attendance) must be passed to receive an overall assessment for the course.

Retake

Students will have the right to retake the course if they have been assessed in activities that account for at least 2/3 of the total course grade. To be eligible to retake the course, a minimum average grade of 3.5 must be obtained. Individual practical exercises are excluded from the retake process.

Plagiarism or Irregularities

If a student commits any irregularity that may significantly alter the grade of an assessment activity, that activity will be graded with a 0, regardless of any disciplinary action that may follow. If multiple irregularities occur in the assessment activities of the same course, the final grade for that course will be 0.

Bibliography

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

Williams, Richard, 1933-2009

https://bibcercador.uab.cat/permalink/34CSUC_UAB/avjci/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>)

Language list

Name	Group	Language	Semester	Turn
(PLAB) Practical laboratories	61	Catalan	first semester	afternoon
(TE) Theory	6	Catalan	first semester	afternoon