

804258 - MA3DAV - Modelling and Advanced 3D Animation

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 VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Teaching unit Optional) BACHELOR'S DEGREE IN VIDEO GAME DESIGN AND DEVELOPMENT (Syllabus 2014). (Teaching unit Optional)	
ECTS credits:	6	Teaching languages: Catalan, Spanish

Teaching staff

Coordinator:	Ripoll Tarré, Marc
Others:	Borras Borrell, Elías

Degree competences to which the subject contributes

Specific:

- CEVJ 7. (ENG) Dominar el gran abanico de herramientas profesionales del sector para la elaboración de contenidos digitales de todo tipo.
- CEVJ 8. (ENG) Dissenyar, modelar, texturitzar i animar objectes, personatges i escenes 2D i 3D per la seva inclusió en projectes digitals, seqüències audiovisuals i videojocs.
- CEVJ 9. (ENG) Aplicar técnicas de modelado y animación avanzada, postproducción y efectos especiales para la elaboración de contenidos digitales y/o su inclusión en un proyecto de videojuego.

Transversal:

- 04 COE N2. EFFICIENT ORAL AND WRITTEN COMMUNICATION - Level 2. Using strategies for preparing and giving oral presentations. Writing texts and documents whose content is coherent, well structured and free of spelling and grammatical errors.
- 06 URI N3. EFFECTIVE USE OF INFORMATION RESOURCES - Level 3. Planning and using the information necessary for an academic assignment (a final thesis, for example) based on a critical appraisal of the information resources used.
- 07 AAT N3. SELF-DIRECTED LEARNING - Level 3. Applying the knowledge gained in completing a task according to its relevance and importance. Deciding how to carry out a task, the amount of time to be devoted to it and the most suitable information sources.
- 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.

Learning objectives of the subject

- To understand the theory of character design.
- To plan characters and environments adapting to every possible mechanic, aesthetic and narrative combinations.
- To understand the work methodology used by professional videogame studios and analyze the importance of teamwork.
- To know commonly used techniques applied to character and level design.
- To strengthen the modeling, texturing and animation basics.



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To use the subject learning to create professional high quality 3d model designs.

To do the exercises proposed in class applying the correct structure, presentation and planification and maintaining a good orthographic and grammatical level.

Study load

Total learning time: 150h	Hours large group:	18h	12.00%
	Hours medium group:	30h	20.00%
	Hours small group:	0h	0.00%
	Guided activities:	12h	8.00%
	Self study:	90h	60.00%

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Content

<p>Dessign</p>	<p>Learning time: 20h Practical classes: 8h Self study : 12h</p>
<p>Description: Game dessign Character dessign Level dessign Concept art and references</p>	
<p>Modeling and texturing</p>	<p>Learning time: 40h Practical classes: 16h Self study : 24h</p>
<p>Description: Polygonal modeling Digital sculpt Retopologize and UVs</p>	
<p>Game level</p>	<p>Learning time: 20h Practical classes: 8h Guided activities: 6h Self study : 6h</p>
<p>Description: Game level construction. VR environments.</p>	
<p>Animation</p>	<p>Learning time: 40h Practical classes: 16h Self study : 24h</p>
<p>Description: Rigging Skinning Character animation Mocap</p>	

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Portfolio	Learning time: 20h Practical classes: 8h Self study : 12h
Description: 3d portfolio Online platforms Good practices Specific objectives: Create a professional portfolio	

Bibliography

Basic:

Demers, Owen. Digital texturing & painting. [S.I.]: New Riders, cop. 2002. ISBN 0735709181.

Ahearn, Luke. 3D game textures: create professional game art using Photoshop [on line]. 3rd ed. Waltham, MA: Focal Press, 2012 [Consultation: 18/04/2018]. Available on: <<https://www.sciencedirect.com/science/book/9780240820774>>. ISBN 9780240820774.

Williams, Richard. The animator's survival kit. Expanded ed. London: Faber and Faber, 2009. ISBN 9780571238347.

Birn, Jeremy. Digital lighting & rendering. 3rd ed. Berkeley, CA: New Riders, cop. 2014. ISBN 0321928989.

Thomas, Frank; Johnston, Ollie. The illusion of life: Disney animation. New York: Hyperion, 1995. ISBN 0786860707.

Others resources:

Hyperlink

<https://creative.pluralsight.com>

Resource

<https://www.cgtrader.com/>

Resource

<http://www.cgchannel.com/>

Resource

<http://www.zbrushcentral.com/>

Resource