

## 804052 - BETMA2-M - Area of Specialisation: Applied Multimedia Technologies II

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 MULTIMEDIA STUDIES (Syllabus 2009). (Teaching unit Optional)  
ECTS credits: 6 Teaching languages: Catalan, Spanish

### Teaching staff

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

### Prior skills

Basic knowledge of polygonal modeling and 3d animation.

### 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.



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To strengthen the modeling, texturing and animation basics.

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:	0h	0.00%
	Hours medium group:	60h	40.00%
	Hours small group:	0h	0.00%
	Guided activities:	0h	0.00%
	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>Specific objectives: To design an interesting character.</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>Specific objectives: To create a professional quality level character</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>Specific objectives: To create a simple environment for the character</p>	



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Animation	Learning time: 40h Practical classes: 16h Self study : 24h
Description: Rigging Skinning Character animation Mocap Specific objectives: Improving the character presentation through a pose or animation	
Portfolio	Learning time: 20h Practical classes: 8h Self study : 12h
Description: 3d portfolio Online platforms Good practices Specific objectives: Create a professional portfolio	

## 804052 - BETMA2-M - Area of Specialisation: Applied Multimedia Technologies II

### Bibliography

#### Basic:

Demers, Owen. Digital texturing & painting. [S.l.]: 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