



Teaching Guide

| Identifying Data | | | | | 2015/16 |
|---------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------|-----------------------|---------|---------|
| Subject (*) | Animación 3D-2 | Code | 616G01033 | | |
| Study programme | Grao en Comunicación Audiovisual | | | | |
| Descriptors | | | | | |
| Cycle | Period | Year | Type | Credits | |
| Graduate | 1st four-month period | Fourth | Obligatoria | 6 | |
| Language | Spanish | | | | |
| Teaching method | Face-to-face | | | | |
| Prerequisites | | | | | |
| Department | Métodos Matemáticos e de Representación | | | | |
| Coordinador | Seoane Nolasco, Antonio José | E-mail | antonio.seoane@udc.es | | |
| Lecturers | Seoane Nolasco, Antonio José | E-mail | antonio.seoane@udc.es | | |
| Web | www.facebook.com/AnimaComu | | | | |
| General description | Asignatura na que se aprende tanto a creación e desenrolo de personaxes tridimensionais complexos como a capacidade artística e técnica para a animación de ditos personaxes para a creación de secuencias audiovisuais. | | | | |

Study programme competences / results

| Code | Study programme competences / results |
|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A1 | Comunicar mensaxes audiovisuais. |
| A2 | Crear produtos audiovisuais. |
| A3 | Xestionar proxectos audiovisuais. |
| A4 | Investigar e analizala comunicación audiovisual. |
| A5 | Coñecelas teorías e a historia da comunicación audiovisual. |
| A7 | Coñecelas técnicas de creación e produción audiovisual. |
| A8 | Coñecela tecnoloxía audiovisual. |
| A11 | Coñecelas metodoloxías de investigación e análise. |
| A12 | Coñecelos principais códigos da mensaxe audiovisual. |
| B1 | Que os estudantes demostraran posuir e comprender coñecementos nun área de estudo que parte da base da educación secundaria xeral, e adoitan atoparse nun nivle que, se ben se apoia en libros de textos avanzados, inclúe tamén algún aspectos que implican coñecementos procedentes da vangarda do seu eido de estudo. |
| B3 | Que os estudantes teñan a capacidade de reunir e interpretar os datos relevantes (normalmente dentro do seu área de estudo) |
| B4 | Que os estudantes poidan transmitir información, ideas, problemas e solucións a un público tanto especializado como non especializado |
| B5 | Que os estudantes desenvolvesen aquelas habilidades de aprendizaxe precisas para emprender estudos posteriores cun alto grao de autonomía |
| B6 | Expresarse correctamente tanto de xeito oral como escrito en linguas oficiais da comunidade autónoma |
| B8 | Empregar as ferramentas básicas das tecnoloxías da información e as comunicacións (TIC) precisas para o exercicio da súa profesión e para a aprendizaxe ao longo da súa vida. |
| B9 | Desenvolverse para o exercicio dunha cidadanía aberta, culta, crítica, comprometida e solidaria capaz de analizar a realidade, diagnosticar problemas, formular e imprantar solución baseadas no coñecemento e orientadas ao ben común |
| C3 | Asumir como profesional e cidadán a importancia da aprendizaxe ao longo da vida. |

Learning outcomes

| Learning outcomes | Study programme competences / results |
|-------------------|---------------------------------------|
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|-------------------------------------------------------------------------------------------------------|-----|----|----|
| Capacidade para crear e animar actores virtuais para a interpretación de papeis en obras audiovisuais | A1 | B1 | C3 |
| | A2 | B3 | |
| | A3 | B4 | |
| | A4 | B5 | |
| | A5 | B6 | |
| | A7 | B8 | |
| | A8 | B9 | |
| | A11 | | |
| | A12 | | |

| Contents | |
|------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Topic | Sub-topic |
| Deseño de personaxes | <ul style="list-style-type: none"> - Tipos de personaxes - Deseño de personaxes - Biografía de un personaxe - Representación visual: corpo, cabeza, expresións, mansos. - Carta de color - Preparación de imaxes de referencia |
| Modelado para animación | <ul style="list-style-type: none"> - Anatomía humana - Topoloxía correcta para animación - Modelado de cabeza - Modelado de corpo - Modelado de expresións - Mapeado UV de obxectos orgánicos |
| Preparación de personaxes para animación | <ul style="list-style-type: none"> - Setup - Esqueletos - Rigging - Skinning - Rigging facial - Expresións faciais mediante blendshapes |
| Animación de bípedos | <ul style="list-style-type: none"> - Estudio do movemento humano - Animación do movemento de andar - Corrección e refinamiento de curvas de animación - Animacións secundarias |
| Animación facial e sincronización labial | <ul style="list-style-type: none"> - Animación de blendshapes - Animación de expresións faciais - Sincronización labial con audio |
| Animación non lineal | <ul style="list-style-type: none"> - Manejo non lineal de fragmentos de animación |

| Planning | | | | |
|--------------------------------|------------------------------------------------------------|--------------------------------------|-------------------------------|-------------|
| Methodologies / tests | Competencies / Results | Teaching hours (in-person & virtual) | Student's personal work hours | Total hours |
| Guest lecture / keynote speech | A1 A2 A3 A4 A5 A7 A8 A11 A12 B1 B3 B4 B5 B6 B8 B9 C3 | 24 | 24 | 48 |
| Supervised projects | A1 A2 A3 A4 A5 A7 A8 A11 A12 B1 B3 B4 B5 B6 B8 B9 C3 | 16 | 80 | 96 |
| Personalized attention | | 6 | 0 | 6 |

(*)The information in the planning table is for guidance only and does not take into account the heterogeneity of the students.



Methodologies

| Methodologies | Description |
|--------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Guest lecture / keynote speech | Explicación dos fundamentos teóricos de cada tema da asignatura. |
| Supervised projects | Explicación da técnica para a realización do traballo tutelado requerido consistente no deseño, creación, modelado, preparación do personaxe para animación (setup) e animación corporal e facial do mesmo. |

Personalized attention

| Methodologies | Description |
|---------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Supervised projects | Tutorías persoalizadas e de grupo para aclarar conceptos teóricos e axudar a resolver os problemas que teñan lugar durante a realización dos traballos prácticos |

Assessment

| Methodologies | Competencies / Results | Description | Qualification |
|---------------------|------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Supervised projects | A1 A2 A3 A4 A5 A7 A8 A11 A12 B1 B3 B4 B5 B6 B8 B9 C3 | Traballo individual consistente no deseño, creación, modelado, preparación do personaxe para animación (setup) e animación corporal e facial do mesmo. O traballo requerirá a entrega de todos os documentos solicitados e deberá cumprir as condicións e criterios esixidos para que o traballo sexa avaliable. Todas as partes do traballo deberán ter un nivel mínimo de calidade, en caso contrario o traballo considerárase como suspenso. O traballo deberá entregarse en CD/DVD o día do exame. | 100 |

Assessment comments

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Sources of information

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| <p>Basic</p> | <ul style="list-style-type: none">- Antonio Seoane (). http://www.facebook.com/AnimaComu.- Dariush Derakhshani (2010). Introducing Maya 2011. John Wiley & Sons Ltd; Edición: Pap/Cdr- Eric Keller, Todd Palamar, Anthony Honn (2010). Mastering Autodesk Maya 2011. John Wiley & Sons Ltd; Edición: Pap/Cdr- Dariush Derakhshani (2011). Introducing Autodesk Maya 2012. John Wiley & Sons Ltd- Todd Palamar, Eric Keller (2011). Mastering Autodesk Maya 2012. John Wiley & Sons Ltd; Edición: Pap/Cdr- John Lasseter (1987). Principles of traditional animation. applied to 3D computer animation. In Proceedings of the 14th annual conference on Computer graphics and interactive techniques (SIGGRAPH '87). ACM- Digital Tutors (2008). Creating stylized females in Maya. PL Studios- Isaac Victor Kerlow (2009). The Art of 3-D Computer Animation and Imaging. John Wiley & Sons Ltd; Edición: 4th Revised- Alberto Rodríguez Rodríguez (2010). Proyectos de animación 3D. Anaya Multimedia- Richard E. Williams (2009). The Animator's Survival Kit. Faber and Faber- Harold Whitaker, John Halas, Tom Sito (2009). Timming for Animation. Focal Press- Digital Tutors (2006). Character setup in Maya. PL Studios- Digital Tutors (2006). Introduction to Maya animation: walk cycle. PL Studios- Digital Tutors (2013). Registro UDC en: https://www.digitaltutors.com/11/group/register.php?g=universidaddelacoru%C3%B1a. Online Digital Tutors O acceso a Digital Tutors e gratuito para os membros da UDC. O rexistro realízase en: https://www.digitaltutors.com/11/group/register.php?g=universidaddelacoru%C3%B1a Hay 5 postos simultáneos, por tanto os usuarios deben pechar a sesión ó acabar para evitar bloquear o acceso a outros usuarios. |
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| Complementary | <ul style="list-style-type: none"> - Peter Ratner (2009). 3-D Human Modeling and Animation. John Wiley & Sons Ltd; Edición: 3rd Revised edition - Pepe Valencia, Jeremy Cantor (2004). Inspired 3D Short Film Production. Paraninfo (Fondo) - Michael Ford, Alan Lehman (2002). Inspired 3d Character Setup. Premier Press - Richard Grandy, Premier Press Development, John Hood, Brad Clark (2005). Inspired 3D Advanced Rigging and Deformations. Premier Press - Kyle Clark (2002). Inspired 3D Character Animation. Premier Press - Stephen Stahlberg, Pascal Blanch (2005). D'artiste Character Modelling: Digital Artists Masterclass. Ballistic Publishing - Paul Fedor, et al. (2007). The Face (Creative Essence). Ballistic Publishing - Mark Snoswell (Redactor) (2007). Creative Essence - the Face: Modeling and Texturing [DVD]. Ballistic Publishing - Angie Jones, Jamie Oliff (2006). Thinking Animation: Bridging the Gap Between 2D and CG. Course Technology PTR - C.Webster (2005). Animation: The Mechanics of Motion. Focal Press - Tony White (1988). The Animator's Workbook: Step-By-Step Techniques of Drawn Animation. Watson-Guptill - Preston Blair (1994). Cartoon Animation. Walter Foster Publishing - Frank Thomas, Ollie Johnston (1997). The Illusion of Life: Disney Animation. Hyperion - Ed Hooks (2003). Acting for Animators: A Complete Guide to Performance Animation. Heinemann Educational Books,U.S.; Edición: Pap/Cdr - Ed Hooks (2011). Acting for Animators. Routledge; Edición: 3 - Tony White (2006). Animation from Pencils to Pixels: Classical Techniques for the Digital Animator. Focal Press - Andy Wyatt (2010). The Complete Digital Animation Course: Principles, Practice, and Techniques: A Practical Guide for Aspiring Animators. Barron's Educational Series - Eric Allen, Kelly L. Murdock, Jared Fong, Adam G. Sidwell (2008). Body Language: Advanced 3D Character Rigging. Sybex - John L. Kundert-Gibbs, Kristin Kundert-Gibbs (2009). Action!: Acting Lessons for CG Animators. John Wiley & Sons Ltd; Edición: Pap/Dvdr - Jason Osipa (2010). Stop Staring: Facial Modeling and Animation Done Right. John Wiley & Sons Ltd; Edición: 3rd Revised edition - Mark Simon (2003). Facial Expressions: A Visual Reference for Artists. Watson-Guptill - Digital Tutors (2008). Introduction to animation in Maya. PL Studios - Digital Tutors (2008). Introduction to rigging in Maya. PL Studios - Digital Tutors (2008). Modeling next-gen characters in Maya. PL Studios - Digital Tutors (2008). Animating next-gen characters in Maya. PL Studios - Digital Tutors (2007). Creating digital humans. PL Studios - Digital Tutors (2008). Animating cartoon characters in Maya. PL Studios - Digital Tutors (2006). Body mechanics and animation in Maya . PL Studios - Digital Tutors (2006). Facial rigging in Maya. PL Studios - Digital Tutors (2006). Female android modeling in Maya. PL Studios - Digital Tutors (2006). Introduction to Maya. PL Studios - Digital Tutors (2007). Cartoon character rigging in Maya. PL Studios - Digital Tutors (2007). Creating cartoon characters in Maya. PL Studios - Digital Tutors (2006). Facial animation and lip sync in Maya . PL Studios |
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Recommendations

Subjects that it is recommended to have taken before

Infografía 3D-1/616G01024

Infografía 3D-2/616G01026

Animación 3D-1/616G01032

Subjects that are recommended to be taken simultaneously

Animación 3D-1/616G01032



| Subjects that continue the syllabus |
|------------------------------------------|
| Efectos especiais na animación/616G01040 |
| Other comments |
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(*)The teaching guide is the document in which the URV publishes the information about all its courses. It is a public document and cannot be modified. Only in exceptional cases can it be revised by the competent agent or duly revised so that it is in line with current legislation.