

Academic Year: 2025/26

202008 - Serious Games

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Teaching Guide Information

Subject code: 202008

Degree program: 10014 - Degree in Digital Creation, Animation and Video Games

Type: Elective

Year: 4

Number of ECTS: 4.5

Period: Second term

Languages:

Lecture-based teaching: Group 101: Galician

Interactive teaching: Group 101: Galician

Degree coordination: Patricia Comesaña Comesaña

Subject coordination: María Luz Castro Pena

Faculty: María Luz Castro Pena

1. Overview

Nesta materia veremos que os videoxogos poden ser máis que entretemento e aprenderemos a deseñar e avaliar xogos aplicados a diferentes ámbitos: educativo, sanitario, empresarial, etc.

2. Educational and learning outcomes (RD 822/2021 degree programs) or competences (RD 1393/2007 degree programs)

Competences (RD 1393/2007 degree programs)

- **[A02]** CE2 - Understanding and ability to analyze the animation and video game industry in its creative and industrial dimensions, as well as its historical evolution.
- **[A19]** CE19 - Knowledge of the fundamentals for designing and defining a video game and evaluating and correcting its various components.
- **[A20]** CE20 - Understanding and application of project management models in animation and video games.
- **[A22]** CE22 - Research and analysis of digital content creation.
- **[A40]** CE40 - Skills and methodologies for creating human-computer interfaces.
- **[B01]** CB1 - That students have demonstrated possession and understanding of knowledge in a field of study that builds upon general secondary education and is typically at a level that, while supported by advanced textbooks, also includes some aspects involving knowledge from the forefront of their field of study.

- **[B02]** CB2 - That students know how to apply their knowledge to their work or vocation in a professional way and possess the competencies that are usually demonstrated through the preparation and defense of arguments and problem-solving within their field of study.
- **[B03]** CB3 - That students have the ability to gather and interpret relevant data (usually within their area of study) to make judgments that include reflection on relevant social, scientific, or ethical issues.
- **[B04]** CB4 - That students can communicate information, ideas, problems, and solutions to both specialized and non-specialized audiences.
- **[B05]** CB5 - That students have developed the learning skills necessary to undertake further studies with a high degree of autonomy.
- **[B06]** CG1 - Organizational and planning skills, especially in designing work aimed at creating the digital audiovisual content that forms part of an animation production or video game.
- **[B07]** CG2 - Ability to effectively solve problems, mainly of a technological nature, and in the field of creating interactive and animated digital content.
- **[B08]** CG3 - IT knowledge, especially regarding the use of state-of-the-art technologies and software within the field of study.
- **[B09]** CG4 - Knowledge of the procedures, skills, and methodologies required to adapt the creative process to digital media and to produce artistic works using specific technologies.
- **[B10]** CG5 - Critical evaluation of available knowledge, technology, and information for their application in problem-solving.
- **[B11]** CG6 - Critical and self-critical thinking skills, necessary in all creative processes that aim for a commitment to the quality of the work, outcomes, and proposed solutions.
- **[B12]** CG7 - Teamwork skills. Ability to tackle projects collaboratively with other students, assuming roles and fulfilling commitments to the group.
- **[B13]** CG8 - Ability to apply knowledge in practice, integrating the different parts of the program and connecting them in the development of complex products.
- **[B14]** CG9 - Project design and management skills, addressing the narrative, technical, and managerial aspects of an animation or video game project.
- **[C01]** CT1 - Correct oral and written expression in the official languages of the autonomous community.
- **[C03]** CT3 - Use of basic tools in information and communication technologies (ICT) necessary for professional practice and lifelong learning.
- **[C04]** CT4 - Development for the exercise of citizenship that respects democratic culture, human rights, and gender perspective.
- **[C05]** CT5 - Understanding the importance of an entrepreneurial culture and knowledge of the resources available to entrepreneurs.
- **[C06]** CT6 - Acquisition of life skills and healthy habits, routines, and lifestyles.
- **[C07]** CT7 - Ability to work in interdisciplinary or transdisciplinary teams, offering proposals that contribute to sustainable environmental, economic, political, and social development.
- **[C08]** CT8 - Appreciation of the importance of research, innovation, and technological development in the socio-economic and cultural advancement of society.
- **[C09]** CT9 - Ability to manage time and resources: develop plans, prioritize activities, identify critical tasks, set deadlines, and meet them.

2.1. Learning outcomes (RD 1393/2007 degree programs)

Learning outcomes	Study programme competences / results		
O alumnado coñecerá a aplicación dos videoxogos máis aló da industria do entretemento. Do mesmo xeito, aprenderá a deseñar videoxogos para ser usados en contornas alternativas como poden ser a educación, o adestramento e a simulación, a optimización de procesos empresariais etc.	A2	B1	C1
	A19	B2	C3
	A20	B3	C4
	A22	B4	C5
	A40	B5	C6
		B6	C7
		B7	C8
		B8	C9
		B9	
		B10	
		B11	
		B12	
		B13	
		B14	

3. Contents

Content unit	Description	Education and learning outcomes / competences	Teaching methodology and training activities	Assessment systems
Topic	Xogos serios: · Gamificación · Simulación e treinamento · Edutainment · Aplicacións sectoriais · Advergaming · Videoxogos para a industria 4.0			

4. Teaching methodologies and training activities

Modality In-person					
Methodology	Description	In-person teaching hours	Virtual teaching hours	Independent study hours	Education and learning outcomes / competences
Personalized attention [MAG00]	Resolución de dúbidas de teoría ou prácticas, traballos tutelados etc. en horario de titorías, presencialmente e de forma telemática mediante correo electrónico e Teams. O seguimento da materia non debe presentar problemas ao estudiantado con matrícula a tempo parcial, xa que non se esixe asistencia. Porén, este alumnado é responsable de estar ao corrente dos materiais colgados no Moodle, así como das tarefas que por ese medio se propoñan para entrega. Estas entregas, de non ser telemáticas, serán acordadas co estudiantado a tempo parcial de xeito que se compatibilice na medida do [...]	2,00	0,00	0,00	
Workshop [MAG16]	Traballos colaborativos nos que o alumnado deberá aplicar os coñecementos expostos nas sesións maxistrais e expoñer as súas conclusións na aula	7,50	0,00	48,00	A22, B06, B10, B12, C03, C04, C06, C07, C08, C09.
Laboratory practice [MAG21]	Desenvolvemento de casos prácticos nos que o alumnado deberá aplicar os coñecementos expostos nas sesións maxistrais para resolver os problemas que aparezan co obxectivo de conseguir o resultado desexado	12,00	0,00	29,00	A20, A40, B02, B03, B04, B05, B07, B08.
Mixed objective/subjective test [MAG32]	Entrega, presentación oral e defensa dun traballo práctico	4,00	0,00	0,00	B01, B11, B13, B14, C01.
Guest lecture / keynote speech [MAG39]	Clases teóricas presenciais, onde se expoñerán os conceptos básicos que o alumnado debe coñecer e que serán de aplicación nos traballos prácticos, tanto presenciais como non presenciais	6,00	0,00	4,00	A02, A19, B09, C05.
Sum of hours by type		31,50	0,00	81,00	
Total hours				112,50	

5. Assessment

Modality In-person

Assessment system	Description	Weighting (%)	Education and learning outcomes / competences
Workshop [SEG16]	Avaliación continua do traballo na aula. Computa ata un máximo de 2 puntos na nota final. A súa realización non é obrigatoria para superar a materia.	20,00	A22, B06, B10, B12, C03, C04, C06, C07, C08, C09.
Laboratory practice [SEG21]	Entrega e defensa de traballos prácticos e informes. Computa ata un máximo de 2 puntos na nota final. A súa realización non é obrigatoria para superar a materia.	20,00	A20, A40, B02, B03, B04, B05, B07, B08.
Mixed objective/subjective test [SEG32]	Entrega e defensa dun traballo final que computa un máximo de 6 puntos sobre a nota final (5 puntos o traballo e 1 punto a presentación). É necesario obter unha nota mínima de 5 nesta proba para superar a materia.	60,00	B01, B11, B13, B14, C01.
Total (%)		100,00	

All aspects related to academic exemption, study dedication, retention, and academic fraud will be governed in accordance with the current [academic regulations](#) of the UDC.

5.1. First opportunity

En caso de non acadar o mínimo na proba mixta, a nota final será a obtida nesta proba.

Realizarase unha avaliación continua do traballo do alumnado e terase en conta a participación activa e con aproveitamento.

A avaliación será a mesma para todas as convocatorias.

Todos os aspectos relacionados con “dispensa académica”, “dedicación ao estudo”, “permanencia” e “fraude académica” rexeranse de acordo coa normativa académica vixente da UDC.

6. Recommended bibliography

Basic bibliography

- (2016). Serious Games: Foundations, Concepts and Practice. Springer. Book. [\[URL\]](#)
- Escribano, Flavio (2020). Homo alien : videojuego y gamificación para el próximo hacking cognitivo. Héroes de papel Studies. Book. [\[URL\]](#)
- Gómez Sanz, Belén (2020). Gamificación y juegos serios : curso práctico. Ra-Ma. Book. [\[URL\]](#)
- McGonigal, Jane (2012). Reality is broken : why games make us better and how they can change the world. Vintage. Book. [\[URL\]](#)
- Quintana, Yuri, García Pañella, Óscar (2017). Serious games for health : mejora tu salud jugando. Gedisa. Book. [\[URL\]](#)
- Werbach, Kevin, Hunter, Dan (2014). Gamificación : revolucionar tu negocio con las técnicas de los juegos. Pearson Educación. Book. [\[URL\]](#)

Supplementary bibliography

- Armero, Ana, coord. (2018). El Aprendizaje en juego : tecnoludismo para el pensamiento crítico. ArsGames. Book. [\[URL\]](#)
- Burak, Asi, Parker, Laura (2021). Power play : cómo los videojuegos pueden salvar el mundo. Héroes de papel. Book. [\[URL\]](#)
- Muriel, Daniel autor, Crawford, Garry autor (2018). Video games as culture : considering the role and importance of video games in contemporary society. Routledge. Book. [\[URL\]](#)
- Ordás, Ana (2018). Gamificación en bibliotecas : el juego como inspiración. UOC. Book. [\[URL\]](#)
- Vorderer, Peter. editor literario; Ritterfeld, Ute. editor literario; Cody, Michael J., editor literario (2009). Serious games : mechanisms and effects. Routledge, 1st ed.. Book. [\[URL\]](#)