Advanced graphics in advertising - course description

General information	
Course name	Advanced graphics in advertising
Course ID	04.2-WE-BizEIP-ZaawMetGrafwRekl-Er
Faculty	Faculty of Computer Science, Electrical Engineering and Automatics
Field of study	E-business
Education profile	practical
Level of studies	First-cycle Erasmus programme
Beginning semester	winter term 2021/2022

Course information	
Semester	2
ECTS credits to win	5
Course type	obligatory
Teaching language	english
Author of syllabus	dr inż. Andrzej Czajkowski

Classes forms					
The class form	Hours per semester (full-time)	Hours per week (full-time	e) Hours per semester (part-time)	Hours per week (part-time) Form of assignment
Lecture	30	2	-	-	Credit with grade
Laboratory	30	2	-	-	Credit with grade

Aim of the course

- Familiarize students with different approaches to create 3D computer graphics.
- Introduce modern CGI environments.
- Introduce the concepts of 3D modelling, texturing and animation.
- Introduce the modern approaches to advertisement creation process such as virtual or augmented reality.

Prerequisites

Digital advertising

Scope

- Concepts of 3D graphics vertex, edge and polygon
- Hard Surface and organic modelling.
- Key framing and interpolation in 3D animation, hierarchy with inheritance in animation.
- Rendering process optimisation and methods
- Tools supports of 3D applications developing and programming.
- Techniques to create virtual worlds with focus on in-game advertising.
- Scripting in 3D environments systems.
- Bridging the real and virtual world to achieve augmented reality.

Teaching methods

laboratory classes, lecture

Learning outcomes and methods of theirs verification

Outcome description	Outcome symbols	Methods of verification	The class form
Can prepare a sample or prototype of mobile advertisement application in augmented or virtual reality		an observation and evaluation of activities during the classescarrying out laboratory reports	 Laboratory
Can use advanced features of programming and developing tools for creation of a advertisement application with 3D graphics		 carrying out laboratory reports 	 Laboratory
Student is able to use different modelling techniques to achieve desirable effect	е	 a final test an observation and evaluation of activities during the classes carrying out laboratory reports 	LectureLaboratory

Outcome description	Outcomesymbols Methods of verification	The class form	
Student knows different approaches to create CGI	a final test	 Lecture 	
	 an observation and evaluation of activities 	 Laboratory 	
	during the classes		
	 carrying out laboratory reports 		
Student can create short animation using key framing and different	• a final test	Lecture	
interpolation methods	 an observation and evaluation of activities 	 Laboratory 	
	during the classes		
	 carrying out laboratory reports 		

Assignment conditions

Lecture - the passing criterion is a sufficient mark from the final test.

Laboratory - the passing criterion are positive marks for laboratory exercises.

Final mark components = lecture: 50% + laboratory: 50%

Recommended reading

- 1. D. Ogilvy, Ogilvy on Advertising, Vintage, 1st Vintage Books ed edition, 1985
- 2. D. Derakhshani, R. L. Derakhshani, Autodesk 3ds Max 2016 Essentials. Sybex, 2015
- 3. M. Pricken, Creative Advertising: Ideas and Techniques from the World's Best Campaigns, Thames & Hudson, 2008
- 4. A. B. Craig, Understanding Augmented Reality: Concepts and Applications, Morgan Kaufmann, 2013

Further reading

- 1. M. McCarthy, How to Cheat in 3ds Max 2015: Get Spectacular Results Fast, Focal Press, 2014
- 2. Adams E.: Fundamentals of Game Design, 3rd edition, New Riders, 2013
- 3. S.J. Gortler, Foundations of 3D Computer Graphics, MIT Press, 2012

Notes

Modified by dr hab. inż. Marek Kowal, prof. UZ (last modification: 12-07-2021 11:41)

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