

**The study guide for the course**  
**Digital Graphics Programing, INF2034\_EN**  
**Vytautas Magnus University, Lithuania**

**Teachers:**

Egidijus Vaškevičius ([iiegva@vdu.lt](mailto:iiegva@vdu.lt))

Edgaras Ščiglinskas ([edgaras.sciglinskas@fc.vdu.lt](mailto:edgaras.sciglinskas@fc.vdu.lt))

Dear students, this guide will help you to understand course structure, assignments in virtual learning environment and link to the learning content. It will explain to you how to study and how your personal achievements will be assessed. You will find information on help contacts, contact hours with the teacher and other important issues.

First, here are the **learning outcomes** of the course. You will be able to:

- ability to analyse the newest trends in Internet and multimedia systems
- apply newest trends in development of novel systems
- knowledge of Internet and multimedia products development, their commercial and social impact
- knowledge of basic and advanced computer science and its application
- ability to analyse and evaluate art projects

Learning material is prepared to acquire these skills learning. It consists of:

- ✓ design tasks;
- ✓ presentations and online consultations in virtual learning environment;
- ✓ practical tasks;
- ✓ online tests in virtual learning environment;
- ✓ real time chat, discussion forums;
- ✓ project work;

The main course topics and assignments are:

Content (topics)	Study week	Contact hours	Assignments	Assignments	Assignments
1. Evolution of Computer, Console and Videogames	1	<u>September. 8</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>	Design Exercise Nr.1	Practical Task Nr. 1 Landscape with Unity3D (Height Map, Landscape Tools, Game Engines and etc.)	Project Work in Groups, Assessment Tests at Moodle
2. Fundamentals of Game Design and Development.	2-3	<u>September. 15-September. 22</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>			
3. Field of Application. Multiplatform.	4	<u>September. 29</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>	Online MIDTERM test at Moodle, Design Exercise Nr. 2	Practical Task Nr. 2 AR Augmented Reality Application. (AR SDK, Open Source Tools – OpenCV, OpenFramework or etc.)	
4. Storytelling and Narrative.	5-6	<u>October. 6 - October. 13</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>			
<b>MIDTERM</b>	<b>October, 2014</b>	<b>Date to be announced</b>			
5. Edutainment, Entertainment, Culture heritage and Virtual community.	7	<u>October. 20</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>			
6. 3D Modelling and Optimization	8-9	<u>October. 27</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>	Design Exercise Nr. 3	Practical Task Nr. 3 Interactive content.	
7. Game World Development.	10-11	<u>November. 3</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>			
8. Character Development	12	<u>November. 10</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>			
9. Programming the Storyline for a Game	14-15	<u>November. 17 - November. 24</u> Worl Time (CET): <b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>	Online EXAM test at Moodle, Design Exercise Nr. 4		
10. Interactive Media Development	16	<u>December. 1 – December. 8</u> Worl Time (CET):			

		<b>Monday 9.15h - 11.15h or 13.00h-15.00h</b>			
<b>EXAMINATION</b>	<b>December, 2014</b>	<b>Date to be announced</b>			

### The dates:

**Design Exercise Nr. 1 Completed by September 22, (CET): Monday 9h.**

**Design Exercise Nr. 2 Completed by October 20, (CET): Monday 9h.**

**Design Exercise Nr. 3 Completed by November 16, (CET): Monday 9h.**

**Design Exercise Nr. 4 Completed by December 8, (CET): Monday 9h.**

**Project work should be prepared and presented by December 1, (CET): Monday 9h.**

**Practical Task Nr. 1 Completed by September 29, (CET): Monday 9h.**

**Practical Task Nr. 2 Completed by October 27, (CET): Monday 9h.**

**Practical Task Nr. 3 Completed by November 24, (CET): Monday 9h.**

During the course, you will have to perform 3 practical tasks, 4 design exercises, project work and assessment tests. Then you will have to pass mid-term and the exam:

<i>Activities</i>	<i>Weight</i>	<i>Total of the final mark</i>
<b>3 practical tasks</b>	4 % each	12 %
<b>4 design tasks</b>	2 % each	8 %
<b>project work</b>	12 %	12 %
<b>assessment tests</b>	-	3 %
<b>mid-term</b>	15 %	15 %
<b>exam</b>	50 %	50 %
<b>Total:</b>	100 %	

### Assignment criteria and weights

<i>Activities</i>	<i>Criteria</i>	<i>Weight of each criteria</i>	<i>Total weight of the activity</i>
<b>Practical Task Nr. 1</b>	Creativity; Contribution to exercises and works; Compliance with Schedule; Completeness of the tasks; The complexity of the task or Project;	20 %	4 %
<b>Practical Task Nr. 2</b>	Creativity; Contribution to exercises and works; Compliance with Schedule; Completeness of the tasks; The complexity of the task or Project;	20 %	4 %
<b>Practical Task Nr. 3</b>	Creativity; Contribution to exercises and works; Compliance with Schedule; Completeness of the tasks; The complexity of the task or Project;	20 %	4 %

<i>Activities</i>	<i>Criteria</i>	<i>Weight of each criteria</i>	<i>Total weight of the activity</i>
<b>Design Task Nr.1</b>	Creativity; Contribution to exercises and works; Compliance with Schedule; Completeness of the tasks; The complexity of the task or Project;	20 %	2 %
<b>Design Task Nr.2</b>	Creativity; Contribution to exercises and works; Compliance with Schedule; Completeness of the tasks; The complexity of the task or Project;	20 %	2 %
<b>Design Task Nr.3</b>	Creativity; Contribution to exercises and works; Compliance with Schedule; Completeness of the tasks; The complexity of the task or Project;	20 %	2 %
<b>Design Task Nr.4</b>	Creativity; Contribution to exercises and works; Compliance with Schedule; Completeness of the tasks; The complexity of the task or Project;	20 %	2 %
<b>Project Work</b>	Creativity; Contribution to exercises and works; Compliance with Schedule; Completeness of the tasks; The complexity of the task or Project; The efficiency of the working in groups;	10 % 15 % 10 % 20 % 20 % 25 %	12 %
<b>Mid-term</b>	15 %	15 %	
<b>Exam</b>	50 %	50 %	
<b>Total:</b>	100 %		

Once a week, you will be consulted online at the discussion in an asynchronous way, answering your questions, as well as invited for the online synchronous discussion. Time: (CET): Monday from 9.15 to 11.15 or from 13.00 to 15.00

The assessment test will be notified not later than one week before the test. Will be notified time and duration of the time when test should be carried out. The assessment test will be every two to three weeks approximately.

Project work should be prepared and presented on time. Progress of the project has to be shown at least once every two weeks at least.

Resources: **Moodle** *Digital graphics programing - INF2034\_EN* (Skaitmeninės grafikos programavimas)