Course Unit Descriptor

Study Programme: Computer Science

Course Unit Title: Introduction to Computer Graphics

Course Unit Code: CS303

Name of Lecturer(s): Dragan Mašulović

Type and Level of Studies: Bachelor Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Summer

Language of instruction: Serbian (primary), English (secondary)

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 5

Prerequisites: Linear Algebra and Analytic Geometry

Course Aims:

In this course students shall acquire basic knowledge of computer graphics modeling and rendering techniques in 2D and 3D using OpenGL.

Learning Outcomes:

At the end of the course a successful student will be able to model elementary graphics objects and invoke basic rendering algorithms using OpenGL.

Syllabus:

- Overview of graphics systems
- Graphics primitives and their attributes
- Geometric transformations
- 2D viewing
- 3D viewing
- 3D object representation
- Visible-surface detection

Illumination models and surface-rendering methods

Required Reading:

Hearn, Baker: "Computer Graphics with OpenGL", 3rd Ed., Pearson Education International, 2004

Foley, van Dam, Feiner, Hughes: "Computer Graphics - Principles and Practice", 2nd Ed, Addison-Wesley, 1996

Weekly Contact Hours: 5	Lectures: 2	Practical work: 3
Tooching Mothods:		

Teaching Methods:

Blackboard lectures, Blackboard exercises, Exercises in computer lab, working in small groups

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class		written exam	
participation		written exam	
Practical work		oral exam	30
Preliminary exam(s)	30+40		

Seminar(s)					
The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam,					
project presentation, sem	ninars, etc.				