Course Unit Descriptor

Study Programme: Computer Science – Master

Course Unit Title: Computer Graphics

Course Unit Code: CS702

Name of Lecturer(s): Dragan Mašulović

Type and Level of Studies: Master Academic Degree

Course Status (compulsory/elective): Elective

Semester (winter/summer): Winter

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

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

Number of ECTS Allocated: 8

Prerequisites: None

Course Aims:

In this course students shall acquire advanced 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 advanced graphics objects and implement advanced rendering algorithms using OpenGL.

Syllabus:

- Advanced 2D viewing
- Advanced 3D viewing
- Advanced 3D object representation and Constructive Solid Geometry
- Advanced illumination models
- Advanced surface-rendering methods, Ray tracing

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

Teaching Methods:

Blackboard demonstration, Working in small groups, Student projects

Knowledge Assessment (maximum of 100 points):

Pre-exam obligations	points	Final exam	points
Active class		written exam	
participation		written exam	
Practical work		oral exam	
Preliminary exam(s)	15+15	Student project	70
Seminar(s)			

The methods of knowledge assessment may differ; the table presents only some of the options: written exam, oral exam, project presentation, seminars, etc.