Study program: Informatics

Course title: Computer Graphics

Professor/assistant: Mihailović D. Đorđe

Type of course: Elective

ECTS credits: 6

Prerequisites: none

Aims of the course: Students get familiar with terms "vector and raster graphics", and can use gained knowledge to use programs for editing vector/raster documents. Students are thought to create vector drawings and illustrations using different programs, to edit photographs, handle photos/images, make corrections, and prepare them for printing.

Learning outcomes: The student understands and is able to explain the term vector/raster graphics from all aspects of modern design and its application, to analyze and differentiate the quality of the work he encounters. The student will be able to use vector/raster documents on projects he will work on in the future.

Syllabus:

Theoretical part:

An introduction to vector and raster graphics.

Creating new vector documents, navigation within the document, tools for selection, transformation and coloring vector objects. Drawing and comparing vector lines, the use of effects on vector objects. Preparation of vector documents for professional printing.

An introduction to software needed for editing raster documents: (creating new raster documents, navigation within the document, tools for selecting raster units, tools for transformation, retouching, coloring, color correction, lighting and color in the photographs, using filters and vector elements in raster documents; preparation of raster documents for professional printing).

Practical part:

Practical exercises – Applying gained theoretical knowledge using software, drawing illustrations, editing photographs, creating commercial material for printing and digital presentation, creating logos, memorandums; transferring vector to raster graphics and editing in programs for raster documents.

Literature:

1. Džeremi Ozborn, Dženifer Smit, Adobe creating Suite 5 Design Premium: digitalna učionica, Mikroknjiga, 2011.
2. Zvonko Aleksić, Illustrator CS5, brzo i lako, Kompjuter biblioteka, 2011.
3. Slavica Prudkov, Photoshop CS5 100 saveta i trikova, Kompjuter bibilioteka 2010.
4. Doc. Dr. Dragan Cvetković, Vektorska i rasterska grafika, Univerzitet Singidunum Beograd, 2009.

Total number of active classes: 75	**Lectures:** 30	**Practical classes:** 45

Teaching methods: Lectures and practical computer exercises

Grading system (maximum number of points 100)

grading scale from 5 to 10: below 51 points – student fails the exam, grade 6 from 51- 60 points, grade 7 from 61-70 points, grade 8 from 71-80 points, grade 9 from 81-90 points, grade 10 from 91- 100 points.

Pre-exam obligations:	**Points:**	**Final exam:**	**Points:**
Activity during theoretical lectures	max 5	Written exam	50
Practical training	max 5		
Written test(s)	max 25		
Term papers	max 15		
Minimum requirement for the final exam	30		