

### DESCRIPTION OF A STUDY COURSE – SYLLABUS

<b>Title of a course</b>	<b>Graphic Communications</b>				
<b>Head of course</b>	<b>Veljko Pevalek, Lecturer</b>				
<b>Study programme</b>	<b>Professional undergraduate study Road Transport</b>				
<b>Status of a course</b>	Obligatory				
<b>Year of study</b>	1.	<b>Semester</b>	I	<b>ECTS credits</b>	5
<b>Teaching plan (L + E + S+ Pr)</b>	2+2+0+0				
<b>Goals of a course</b>					
Introduce students to the basics of design geometry. To learn the rules of orthogonal projection, spatial presentation and spatial sketching in the presentation of various elements in the technical field. Show and familiarize students with the rules when designing and describing technical drawings and documentation with accessories and with the help of a computer according to the rules of technical drawing.					
<b>Conditions for enrolling course</b>					
No conditions					
<b>Learning outcomes on a level of a study programme which includes course</b>					
Outcome 9: Link engineering principles and technical principles in transport systems. Outcome 11: Select appropriate information technology and software to address specific road transport problems. Outcome 14: Independently present professional content on oral, written and graphical basis using the usual tools in Croatian and/or foreign language.					
<b>Expected learning outcomes on a level of a course</b>					
<ol style="list-style-type: none"> <li>1. Draw orthogonal and axonometric projections of objects according to the rules of descriptive geometry.</li> <li>2. Interpret three-dimensional shapes from their orthogonal projections and vice versa.</li> <li>3. Create simple technical designs and sketches according to the rules of technical drawing.</li> <li>4. Apply simplifications and graphic symbols when drawing technical designs.</li> <li>5. Create and interpret simple technical designs in AutoCAD computer software.</li> </ol>					
<b>Content of a course</b>					
Elements of graphic communications. About standardisation and norms. Orthogonal projection and axonometry. Displaying of technical objects (sections, hatching, peculiarities and simplification in drawing). Dimensioning. Standard numbers. Surface roughness. Tolerances and fits (tolerances of a segment of a line and of angles, shape and position tolerances, ISO tolerance system). The use of a computer in technical documentation working out (basics of CAD).					
<b>Teaching modes</b>	<input checked="" type="checkbox"/> lectures <input type="checkbox"/> auditory exercises <input checked="" type="checkbox"/> seminars and workshops <input type="checkbox"/> distance learning <input type="checkbox"/> field classes		<input checked="" type="checkbox"/> individual assignments <input type="checkbox"/> multimedia and network <input type="checkbox"/> laboratory <input type="checkbox"/> supervisor's work <input type="checkbox"/> other _____		
<b>Comments</b>					
<b>Students' obligations</b>					
Prerequisite for passing the full exam is the achievement of 50% of the projected points in EXIT 5					
<b>Grading, evaluation and monitoring of students' work continuously during lectures and exams</b>					
Grading is based upon evaluation of course's learning outcomes' adoption. Grading is performed continuously during lectures and/or during exam, in compliance with the provisions of Regulation on the assessment of students.					
<b>Continuous check-up:</b>					

Outcomes	Pre-exam I	Pre-exam 2	Oral exam on computer	Home assignment (program)	Threshold	Max
Outcome 1	15%			8%	11,5%	23%
Outcome 2	15%			7%	11%	22%
Outcome 3		20%			10%	20%
Outcome 4		10%			5%	10%
Outcome 5			25%		12,5%	25%
Percentage of ECTS	1,5	1,5	1,25	0.75		
Total	30%	30%	25%	15%	50%	100%

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

**Exam term:**

Outcomes	Written exam	Oral exam	Max
Outcome 1	15%	15%	30%
Outcome 2	15%	15%	30%
Outcome 3	15%	15%	30%
Outcome 4	5%	5%	10%
Percentage of ECTS	2,5	2,5	
Total	50%	50%	100 %

A student has passed the exam if he has acquired a percentage of credits for each learning outcome higher or equal to defined threshold.

**Grading:**

A student has passed the exam if he has acquired at least 50% of anticipated credits of a specific learning outcome. If a student has passed learning outcomes of all courses, the accomplished credits (percentages) of all passed learning outcomes are being added, while the final grade is defined upon following table:

Range of credits (percentages)	Numerical grade	ECTS grade
90,00 – 100,00	Excellent (5)	A
75,00 – 89,99	Very good (4)	B
60,00 – 74,99	Good (3)	C
50,00 – 59,99	Sufficient (2)	D
0,00 – 49,99	Insufficient (1)	F

#### Obligatory literature

1. Szivovica, V. i Sliepčević, A: Nacrtna geometrija 1. i 2. dio, Element, Zagreb, 1997.
2. Hercigonja, E.: Tehnička grafika, Školska knjiga, Zagreb, 1999.
3. Lučić, M.: AutoCAD, priručnik za teh. crtanje na računalu, Naklada Lučić – Tenja, 2005. (ili preko Weba na "Superknjižara")

#### Additional literature

1. Inženjerski priručnik IP1, Školska knjiga, Zagreb, 1996.

