#### **COURSE SYLLABUS**

Ken: Geometry

Credits range (max. 12 cr.): 8

Subjects: 1) DESCRIPTIVE GEOMETRY 1, 2) DESCRIPTIVE GEOMETRY 2

(1.) Subject name: DESCRIPTIVE GEOMETRY 1 Credits: 4

Subject labelling: obligatory

Subject's theoretical or practical 'training characteristics' 80-20 (credit%)

Type of the class<sup>1</sup>: lecture / practical lessons 2 / 2 per week,

(language of the coure: english)

Evaluation<sup>2</sup>: examination

Further exercises: midterm tasks, homeworks

Semester: **1st**Prerequisites: -

## General course description

This lecture and practical based course aims to develop the skills of architecture students regarding the following topics, in frame of descriptive geometry: Application of imagery methods used in architecture and by related branches of building industry and civil engineering, internalizing of switching among these in frame of the descriptive geometry. Detection and application of relation of sizes regarding projected elements by use of geometrical constructions, imagery and intersection of solids and polyhedrons.

The studied imagery methods of this course are bases of the conventional axonometric projections, central projection like central axial collineation, orthogonal projections like Mongesystem and multi view orthographic projection as well as bases of the contour map system.

## Selected bibliography:

Minor Clyde Hawk, Schaum's Outline of Theory and Problems of Descriptive Geometry Julia McMorrough, Drawing for Architects

Francis D. K. Ching, Architecture – Form, Space and Order

Coure teacher: Attila Béla Széll dr. associate professor, DLA habil.

## **Instructor:**

Réka Sárközi, assistant lecturer

#### **Requirements in study period:**

The participation on the classes is obligatory. The maximum amount of the missed classes is 3 per semester due to the Study and Examination Regulations.

### **Necessary tools for the practical lessons:**

three rulers: 1 linear, 2 perpendicular (45°, 30°-60°)

callipers

printed exercise sheets

**Nftv. 108.** § 37. *tanóra*: a tantervben meghatározott tanulmányi követelmények teljesítéséhez az oktató személyes közreműködését igénylő foglalkozás (előadás, szeminárium, gyakorlat, konzultáció), amelynek időtartama legalább negyvenöt, legfeljebb hatvan perc.

<sup>&</sup>lt;sup>2</sup> pl. folyamatos számonkérés, évközi beszámoló

pencil, colored pencils

# The exercises and scores of the semester:

homework: max. 8\*5=40
1st midterm task: max. 30

1st midterm task:max. 30min. 152nd midterm task:max. 30min. 15

max. 100 min. 55

## homework:

deadline for maximum 5 points: next practical lesson replacement for maximum 4 points: 2 weeks after deadline

## 1st midterm task:

deadline for maximum 30 points: 26th of October replacement for maximum 25 points: 9th of November

# 2nd midterm task:

deadline for maximum 30 points: 14th of December replacement for maximum 25 points: 2nd of January

## **Grades:**

88-100	5
77-87	4
66-76	3
55-65	2
0-54	1

Classes in the semester 2017/2018. I:							
Code	Teacher	Day/time		Note			
EPE132AN-EA-00	Réka Sárközi	Monday 7:45	A201				
EPE132AN-GY-01	Réka Sárközi	Monday 9:30	A316				
EPE132AN-GY-02	Réka Sárközi	Monday 11:15	A316				

Scedule of the semester					
week	LECTURE	PRACTICE			
1.	ORIENTATION DAY				
2.	Introduction. Projection types. Monge-system, Image of spatial elements.	Spatial element is Monge-system.			
3.	Parallelism, perpendicularity in the Monge-system. Position of lines, polygons. Image of solids.	Spatial elements, polygons and solids in Monge-system.			
4.	Axonometric drawing. Types of Axonometry.	Spatial elements in Axonometry.			
5.	Image plane transformation. New image plane in monge system.	Image plane transformation. New image plane in monge system.			
6.	Axonometry with transformation.	Axonometry with transformation.			
7.	Consultation about the 1st midterm task. Deadline: 26th of October.				
8.	NATIONAL HOLIDAY				
9.	AUTUMN BREAK				
		<del>,</del>			
10.	Solid's intersection with image plane transformation.	Architectural drawing in Monge and Axonometry.			
11.	Planes in Monge-system. Piercing point and planes' intersection.	Architectural drawing in Monge and Axonometry.			
12.	Solid's intersection without transformation.	Architectural drawing in Monge and Axonometry.			
13.	Intersection of two solids.	Architectural drawing in Monge and Axonometry.			
14.	Consultation about the 2nd midterm task. Deadline: 14th of December.				
15.	Consultation about the 2nd midterm task. Deadline: 14th of December.				

week	Monday	Tuesday	Wednesday	Thursday	Friday	
study period						
1	Orientation day					
2	Lecture + Practice					
3	Lecture + Practice					
4	Lecture + Practice					
5	Lecture + Practice					
6	Lecture + Practice					
7	Consultation					
8	8 NATIONAL HOLIDAY			1st midterm task deadline		
9			AUTUMN BREAK			
10					1st midterm task	
10					replacement	
11	Lecture + Practice					
12	Lecture + Practice					
13	Lecture + Practice					
14	Consultation					
15	Consultation				2st midterm task	
13	Consultation				deadline	
		1	exam period			
1						
2						
3	NEW	YEAR	2st midterm task replacement			
4						
5						