

## DESCRIPTION AND SYLLABUS

Name of the subject in Hungarian:	Descriptive Geometry 1.
Name of the subject in English:	Descriptive Geometry I.
Credit value of the subject:	4
The code of the subject in the electronic study system:	BN-DESGE1-04-GY
Classification of the subject:	Obligatory
Language of instruction (in case of non-Hungarian courses):	English
Institute or department responsible for the subject:	-
Course type and number of contact hours:	Practical, class per week: 2, class per semester: 0
Mode of study: (Full-time / Part-time):	Full-time training
The semester in which the subject is open for registration:	2022/2023 1st semester
Prerequisite(s):	-

### THE PURPOSE OF THE SUBJECT, LEARNING OUTCOMES:

Students develop their skills to visualize spaces in plain projection, perspective and axonometric views. Their lexical knowledge extends with the basic notions (ie.: viewpoint, view angle, projection) of visual representation of their built environment. They will be able to precisely express their concept communicate with other creative or art-related fields of sciences visually.

### SUMMARY OF THE CONTENT OF THE SUBJECT

The course will go over all commonly used projection methods, and help understand the differences and main uses between them. First, we will go through the basics of Descriptive Geometry. During this course, we will:

Reconstruct 3D objects using parallel projections  
examine the relationship between 3D space and it's viewer through Central Projection.  
Construct Cast and Self Shadow to better represent 3D objects

### STUDENT'S TASKS AND PLANNED LEARNING ACTIVITIES:

1. Attending the lectures, bringing necessary tools (Pencil, Eraser, Drawing Compass, At least 2 Rulers (one of which should be rectangular), A4 and A3 paper sheets.)
2. Finishing the constructions during lectures simultaneously with the teacher
3. In case of a student's absence, preparing for the next lecture by finishing the construction made during the missed lecture
4. The completion of individual excersises as homework assignments between lectures
5. Consultation during Lectures about personal tasks

### EVALUATION OF THE SUBJECT:

The presence of each student is tracked on an attendance sheet. The student's work during lectures is evaluated based on the activity during a specific lecture and by the quality of the construction created during that lecture.

After each lecture, students get homework assignments (exercise construction), which they need to present at the start of the next lecture.

The grade is based on the completion and quality of these constructions.

Method of course evaluation:

- Presence during lectures (tracked on the attendance sheet)
- Completion of constructions during lectures (checked at the end of each lecture)
- Completion of homework assignments between lectures (checked at the start of each lecture)

Every construction is evaluated by the following:

- the content, the documentation and the quality of the construction
- completion of the task on time

Points of interest:

91-100%: excellent

76-90%: good

61-75%: satisfactory

51-65%: pass

0-50%: fail

1. Professional, practical knowledge (35%)

Using tools

Use of software

Workflow planning

2. Theoretical knowledge (30%)

Research

Problem raising

Conclusions

3. Creative skills (20%)

Individual creativity

Innovative thinking

Vocation

4. Soft skills (15%)

Cooperation

Contributing skills

Flexibility

Communication

Presentation

Communication during workflows

Self-assessment

The evaluation is based on the completed work and the documentation and oral report presenting it on unpacking.

The student receives a grade and an oral assessment, and self-reflection exercises take place during the semester.

**OBLIGATORY READING LIST:**

- Lőrincz Pál, Dr. Petrich Géza : *Ábrázoló geometria*, Nemzeti Tankönyvkiadó, 2003

**RECOMMENDED READING LIST:**

- Kólya Dániel: *Ábrázoló geometria példatár*. Műszaki Kvk., cop. 1981
- Lichtensteiner, Karl: *Műszaki ábrázoló geometria*. B+V K., 1994