

## Tárgytematika / Course Description

### Technical Drawing 1

GKNB\_MGTA001

**Tárgyfelelős neve /**

**Teacher's name:** dr. Hajdu Flóra

**Félév / Semester:** 2022/23/1

**Beszámolási forma /**

**Assesment:** Folyamatos számonkérés

**Tárgy heti óraszám /**

**Teaching hours(week):** 2/2/0

**Tárgy féléves óraszám /**

**Teaching hours(sem.):** 0/0/0

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### OKTATÁS CÉLJA / AIM OF THE COURSE

#### Course description

The course covers the interpretation, creation and use of technical drawings. The standards required for technical communication are described. Two-dimensional representation of spatial three-dimensional objects and the practical applications are expounded. Provides skill in recognizing and drawing the most common machine elements.

#### Aim of course

- Obtain basic knowledge of the technical representation methods
- Development of visual perception
- Introducing and practicing the contents of international and national standards

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### TANTÁRGY TARTALMA / DESCRIPTION

#### Content of course

-Assesment

-Drawing standards

-Technical drawing requirements

-Basic drafting

-Applied geometry: parallel, perpendicular lines, angles, equilateral triangle, square, pentagon, hexagon, ellipse, etc.

-Pictorial representation

-Axonometry: isometric, dimetric and oblique projection

-Orthographic representation: first angle and third angle projection

-Auxiliary views

-Section of solids: prism, cylinder

-Dimensioning, tolerances

-Sectional views: full-section, half-section, offset section, revolved section, broken-out section

-Special views: detailed view, partial view, local view

-Tolerances, fits

-Surface finish

-Technical drawing examples

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## **SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD**

### **Assesment**

- 2 homework (10+20) – 30%
- 2 mid-term tests (30+30) - 60%
- 2 small test (5+5) - 10%

## Homeworks

Task	Start	Deadline
Ortographic and pictorial representations of a truncated prism and a cylinder	2. week	8. week
Engineering drawing of 2 parts	8. week	12. week

The drawings must be submitted up to the deadline. In the event of a delay, 2 marks will be deducted from the final score.

Evaluating the tasks, the following is considered:

- required number of views
- lineweights
- dimensions
- filled in titleblock
- accuracy

Successful homework is max. 10 and 20 marks

- If the task can not be accepted (does not reach 50%), it can be re-done, but the maximum score is only 5 and 10 marks in this case.
- For pass at least 50% of the maximum 10 and 20 marks (ie 5 and 10 marks) should be reached of each homework, otherwise the mid-term grade will be inadequate (signature denied!)

- Homework can only be submitted during the lecture period! Re-done homework can be submitted till the end of the examination period, but only if it was submitted during the lecture period.

#### Practical class tasks

- Each task is worth 5 marks
- At least 5 marks should be achieved, otherwise the mid-term grade will be inadequate (signature denied)!
- Expected times are 6. week and 11. week

#### Mid-term tests

1. test: expected time: 7. week, available score: 30

2. test: expected time 13. week, available score 30;

For pass at least 50% of the maximum marks (i.e. 15 marks) should be reached on each tests, otherwise the mid-term grade will be inadequate (1)

Inadequate test can be corrected with a re-test in the 14. week

The maximum score of the re-test is 50% (15 marks)

Inadequate mid-term tests can be corrected with an exam during the examination period, but only if other requirements are fulfilled (i.e. 50% from the homeworks and practical class tasks)

Consultation about the homeworks and test is possible the next week after the assignment!

#### Grade:

0 - 49 marks	inadequate	<b>1</b>
50 - 64 marks	adequate	<b>2</b>
65 - 74 marks	average	<b>3</b>

75 - 84 marks      good      4

85 - 100 marks      excellent      5

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## KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

### **Obligatory material**

Presentation slides

C. Jensen, J. D. Helsel, D. R. Short: Engineering Drawing&Design

### **Recommended material**

O. Ostrowsky: Engineering Drawings with CAD applications

F. Háromi, G. Kovács: Műszaki Ábrázolás (in Hungarian)