

Tárgytematika / Course Description

Technical Drawing 1

GKNB_MGTA001

Tárgyfelelős neve /
Teacher's name: dr. Balogh Tibor

Félév / Semester: 2018/19/1

Beszámolási forma /
Assesment: Folyamatos számonkérés

Tárgy heti óraszám /
Teaching hours(week): 2/2/0

Tárgy féléves óraszám /
Teaching hours(sem.): 0/0/0

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

TANTÁRGY TARTALMA / DESCRIPTION

Content of course

Week	Topic
1	Assessment Drawing Standards Technical Drawings Requirements
2	Basic drafting Applied geometry parallel, perpendicular lines, angles, equilateral triangle, square, pentagon, hexagon, ellipse, etc.
3	Pictorial representation Axonometry: isometric, dimetric and oblique projection

4	Ortographic representation first angle and third angle projection
5	Auxiliary views Sections of solids: prism, cylinder
6	Dimensioning
7	Mid-term test
8	Sectional views: full section, half-sections
9	Sectional views: offset section, revolved section, broken-out section
10	Special views: detailed view, partial view, local view
11	Tolerances
12	Mid-term test
13	Surface finish Technical drawing examples
14	Re-test

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

Assesment

2 homeworks (10+20) – 30%

5 tasks on practical classes (5x2) – 10%

2 mid-term tests (30 + 30) -60%

Homeworks

Task	Start	Deadline
Ortographic and pictorial representations of a truncated prism	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 the mark at least 50% of the maximum 30 marks (ie 15 marks) should be reached, otherwise the mid-term mark will be inadequate (signature denied!)
- Homework and re-done homework can only be submitted during the lecture period!

Practical class tasks

- Each task is worth 2 marks each
- At least 5 marks must be achieved in total, otherwise the mid-term mark will be inadequate (signature denied!)

Mid-term tests

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

2. test: expected time 12. week, available score 30.

- For the mark at least 50% of the maximum marks (ie. 15 marks) should be reached on each tests, otherwise the mid-term mark 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 test can be corrected with an exam during the examination period, but only if the other requirements (ie. 50% from the homeworks and practical class tasks) are fulfilled.

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

Grade:

0 - 49 marks	inadequate	1
50 - 60 marks	adequate	2
61 - 70 marks	average	3
71 - 80 marks	good	4
81 - 100 marks	excellent	5

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)
