

Tárgytematika / Course Description

Production and processing of engineering materials

AJNB_ATT008

Tárgyfelelős neve /

Teacher's name: dr. Dogossy Gábor

Félév / Semester: 2019/20/1

Beszámolási forma /

Assesment: Vizsga

Tárgy heti óraszám /

Teaching hours(week): 4/0/0

Tárgy féléves óraszám /

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

OKTATÁS CÉLJA / AIM OF THE COURSE

Introducing the students through the technological processes that are common in the mechanical industry, and by introducing their machines, establish the subjects included in the core material and the differentiated professional module.

TANTÁRGY TARTALMA / DESCRIPTION

The schedule and the content of the semester (exact schedule will be announced in the first week of education, taking into account holidays):

The contents of the first 7 weeks are (from 1 to 7 educational weeks):

Metallurgy; Primer casting of steel; Casting; Powder metallurgy; Hot bulk metal forming; Cold bulk metal forming; Sheet metal forming; Production and processing of polymers; Production of polymer composites; Joining of engineering materials; Welding

The contents of the second 7 weeks are (from 8 to 14 educational weeks):

Main production processes and auxiliary processes, mass production, production methods; Model and concept of machine engineering technology; Basic concepts of cutting machining; Cinematic and structural construction of cutting machines; The process of cutting machining, tool wear, tool life; Tools, tooling materials and auxiliary materials; Cutting machining; turning, drilling, milling, planing, chiseling, abrasive processes; Types of special machining; UP, HSC, MMS, EDM, LBM; Automation of manufacturing processes, CNC technique; Production cells, production systems; Machining planning and its documentation

SZÁMONKÉRÉSI ÉS ÉRTÉKELÉSI RENDSZERE / ASSESSMENT'S METHOD

Condition of signature

- participation in lectures is compulsory. We will check the attendance 8 times during the semester, of which at least 5 times must be taken (the absence of this will result in the denial of the end of semester!). Absence can only be justified in very justified cases and only by the lecturers of the subject.
- participation in laboratory exercises and preparation of protocols is mandatory, incomplete performance will result in the refusal of the end of semester signature!
- laboratory exercises can only be replaced during the period of study and only at the times indicated by

the department.

Assessment method: mid-term work + oral exam

- we will check your presence 8 times. Who will be present at all times will get a total of 8 points. Each miss is a loss of 1 point.

- completion of all required laboratory practice (L1.-L6.), preparation of minutes in total 6 points. The prerequisite for this score is the appearance of the exercises and the submission of protocols that meet the formal content requirements.

- two midterm exam are written during the term, participation is not obligatory, their omission leads to a loss of points. By writing, you can get 13-13 points. We do not write postgraduate papers!

- Points to be collected during the semester and exam:

o lecture points: 8 points

o labor points: 6 points

o 1. midterm exam: 13 points

o 2. midterm exam: 13 points

o Oral exam: 60 points

Total: 100pont

- we take into account the sum of the total scores received for the evaluation of the semester and the sum of the results of the oral exam.

- the maximum score of the oral exam is 60 points, the exam pass is insufficient if the exam total does not reach 30 points and at least 15 points must be achieved separately from the two parts.

- In CV course, the maximum score of the exam is 100 points, of which at least 51 points must be achieved, and the minimum of 25 points must be achieved separately from the two parts.

Exam grade scores: mid-term work + exam

- 0-50 points insufficient (1)

- 51-62 points sufficient (2)

- 63-74 points medium (3)

- 75-86 points good (4)

- above 87 points excellent (5)

KÖTELEZŐ IRODALOM / OBLIGATORY MATERIAL

The presentation slides will be published.
