UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester:	2015/16/2
Course:	Fine Mechanics
Code:	VEMKGEB112F
Responsible department:	Institute of Mechanical Engineering
Department code:	MKGEI
Responsible instructor:	dr. Imre Timár

Course objectives:

The students getting acquainted to the basics of precision mechanic. This subject deals further with on the mechanical principle based measuring systems

Course content:

1 Introduction1.1 characterition of mechanical components 1.2 design and build of mechanical components 1.3 measuring and sizing basics 2 Construction materials 3 Standards 3.1 standard numbers 3.2 dimensions, tolerances, fits 3.3 technical surfaces 4 Non welding connections 4.1 fusion welding connections 4.2 press welding connections 4.3 solder joints 5 Non welding connections II. 4.4 adhesive connections 4.5 riveting connections 4.6 press associations 6 Dismountable connections 5.1 screw 5.2 motion screws 5.3 Welle-hub connections 5.4 pen and pin connections 7 Mechanical storage elements (springs) 6.1 characteristics, floating behavior, spring work 6.2 materials 6.3 bend Springs 8 Mechanical storage elements (springs) II. 6.4 torsion springs 6.5 more metal springs (including Bimetalle) 6.6 rubber Springs 9 Rotating and moveing elements 8.1 axes and waves 8.2 friction and lubricants 8.3 bearing 8.4 bearings 10 9.1 inventory and shaft seals 9.2 couplings, brakes, attacks 11 Elements for translational motions (guides) 12 Energy storage systems. 13 Envelope shoots 10.1 belt shoots 10.2 chain shoots 14 Introduction to the calculator application elements 15 Test paper.

Requirements, evaluation and grading:

The Student must take part on more than 80 % of the Lessons. During the semester will be 2 test on the 7-th and 13-th week of the semester.

Required and recommended readings:

Kuti J.: Finommechanikai elemek és készülékek. Bp., MK. 1997.; Tatár J.: Finommechanika Bp., Műszaki Könyvkiadó, 1997. ;Varga J.: Finommechanikai elemek. Bp., MK. 1996.