UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester: 2012/13/1

Course: Process Engineering Laboratory

Code: VEMKFO4136A

Responsible department: Department of Process Engineering

Department code: MKFO

Responsible instructor: dr. Lajos Nagy

Course objectives:

Development of application skill for methods and tools of modeling, control, and design.

Course content:

Modeling and parameter identification of level control system. Solving of the identification and control problems of an electric heater. Solving of control problems of a batch reactor with GENIE, iFIX software. Investigation of a complex system with ASPEN PLUS software. Simulation and control of a CSTR with MATLAB/SIMULINK software Final report and presentation

Requirements, evaluation and grading:

Grading is based on the three laboratory assignments, on the individual project and on a written examination. The whole content of the introductory lectures and the laboratory assignments are included in the written and verbal examination. The written examination includes two question for each assignment including the individual project. 20 points can be obtained for each answer. The result of the written and verbal examination is weighted by 20-20 % when taken into account in the final mark. The final mark is determined according to following table based on the sum of points obtained on the laboratory assignments (max 40 points) and on the individual project (max 20 points) and the weighted points of the written and verbal examination (max 40 points): points final mark above 80 excellent (5) 70-79 good (4) 60-69 medium (3) 50-59 pass (2) below 50 fail (1)

Required and recommended readings:

A tárgy előadás anyaga, a mérésekhez kiadott tanszéki leírások.