V P

UNIVERSITY OF PANNONIA

COURSE DATASHEET

Semester: 2012/13/1

Course: Bioprocessing lab training

Code: VEMKBMB332B

Responsible department: Research Institute on Bioengineering, Membrane Technology and Energetics

Department code: MKBME

Responsible instructor: dr. Béla Nándor Nemestóthy

Course objectives:

Study bio engineering processes like inocolum preparation, centrifugation, cell counting. Students are work individually or groups of 3-4.

Course content:

- 1. Sterilization, laminar flow box, microscope.
- 2. Inoculation cell counting (OD, photometric).
- 3. Parts of a bioreactor, control possibilities.
- 4. Oxygen supply, O2 determination electrodes.
- 5. Cell fixation methods.

Requirements, evaluation and grading:

The accomplishment of the all measurements. Preparing a related report and a preceding test.

Required and recommended readings:

Biokémia, Elődi P., (Akadémiai Kiadó, Budapest), 1989, (Hung). Biochemical Engineering Fundamentals, Bailey, J. E., Ollis, D. F., (McGraw-Hill, New York), 1986.