



## COURSE DATASHEET

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| <b>Semester:</b>               | 2016/17/1  |
| <b>Course:</b>                 | Bioprocessing lab training   |
| <b>Code:</b>                   | VEMKBMB332B  |
| <b>Responsible department:</b> | Research Institute on Bioengineering, Membrane Technology and Energetics |
| <b>Department code:</b>        | MKBME  |
| <b>Responsible instructor:</b> | dr. Béla Nándor Nemestóthy   |

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### Course objectives:

Study bio engineering processes like inoculum 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, O<sub>2</sub> 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.