



COURSE DATASHEET

Semester:	2013/14/1
Course:	Up-to-date biotechnology processes laboratory practice
Code:	VEMKBMM434K
Responsible department:	Research Institute on Bioengineering, Membrane Technology and Energetics
Department code:	MKBME
Responsible instructor:	dr. Béla Nándor Nemestóthy

Course objectives:

To introduce students into the up-to-date bioengineering processes in the practice, to obtain routine in some practical methods, techniques.

Course content:

1. Introduction - safety instructions
- 2-3. Enzyme kinetics measurements
- 4-5. Experiment in immobilized enzyme reactor
- 6-7. Novel processes in sterile microbial technologies
8. Consultation, assessment
- 9-10. Experiment with immobilized cells
- 11-12. Novel processes in downstream
13. Controlling techniques
14. Consultation, assesment

Requirements, evaluation and grading:

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

Required and recommended readings:

Buchholz, K., Kasche, V., Bornscheuer, U. T.: Biocatalysts and enzyme technology, Wiley, Weinheim, 2005
Industrial enzymology, Ed. by Godfrey. T., West, T., MacMillan Press, London, 1996