# V P

# UNIVERSITY OF PANNONIA

### COURSE DATASHEET

Semester: 2012/13/1

Course: Up-to-Date Methods in the Petroleum Industry

Code: VEMKOLM114E

**Responsible department:** Department of Hydrocarbon and Coal Processing

Department code: MKOL

Responsible instructor: Dr. Jenő Hancsók

### Course objectives:

Presenting the base and modern processes of the refining industry.

### Course content:

- 1. Introduction. Energy, power plants.
- 2. Preparation of natural gas and crude oil in the field
- 3. Natural gas cleaning and processing. LNG, LPG, NGL.
- 4. Refineries.
- 5. Separation processes in the hydrocarbon industry
- 6. Conversion processes I. Hydrotreating.
- 7. Conversion processes II. Alkylation, oligomerization.
- 8. Conversion processes III. C4-C7 isomerization
- 9. Conversion processes IV. Fluid catalytic cracking
- 10. Conversion processes V. Hydrocracking
- 11. Production of base oils
- 12. Processing of residues.
- 13. Additives in crude oil refining
- 14. Refinery products and blending.

## Requirements, evaluation and grading:

Participation on the lectures not compulsory. Scoring based on the following method: exam (written) + exam (oral)

### Required and recommended readings: