APPLIED CHEMISTRY AND TRANSPORT PROCESSES

MSC IN MATERIALS ENGINEERING
(full time training)

COURSE SHEET

UNIVERSITY OF MISKOLC
FACULTY OF MATERIALS SCIENCE AND ENGINEERING
INSTITUTE OF CHEMISTRY

2018/19. 2nd semester, Miskolc

Course sheet

Applied Chemistry and Transport processes

Course title: **APPLIED CHEMISTRY AND TRANSPORT PROCESSES** MAKKEM272M		
Lecturer: **Dr. Mogyoródy Ferenc**	*weekly lessons:* **2+1**	*Number of credits:* **6**
Type of the subject: **Faculty of materials Science engineering MSc Level**		
Pre-condition for subject inclusion: **General and inorganic Chemistry**		

Institution responsible for the subject:
University of Miskolc
Faculty of Materials Science and Engineering
Institute of Chemistry

Goal of the subject:
To teach the students the knowledges of the chemistry, which are necessary for the technical engineers in the non-chemical industry.

Description of the subject:

Type and influence of the chemical reactions, the chemical speciality of the materials used in engineering. Quantity of the technological waters, chemical principles of technological water treatment. The chemistry of the natural gas, oil, mineral coal used for energy production. Green chemistry. C_1-chemistry, Transport processes, viscosity, diffusion, heat transport, electric conductance, basics of hydrodynamics.

Conditions for obtaining of credit points:
Successful examination.

Method of education:
Regular oral presentations. The material of the lectures is available for the students in pdf format.

Method of examination:
Written and oral exam.

Evaluation:
On basis of examination

Recommended literature:
The material of the lectures is available for the students in pdf format.
P.W. Atkins: Physical Chemistry II.

Applied chemistry and transport processes course sheet

THEMATIC

Week	Thematic
1	Repeating Physical Chemistry
2	Green Chemistry
3	Types of Chemical Reactions and influence
4	C_1 chemistry
5	The Water, water treatment, drinking water, industrial water, waste water and teratment
6	Connection to chemical technologies
7	Raw materials of the chemical industry
8	Energy production
9	Viscosity
10	Diffusion
11	Heat transport
12	Electric conductivity
13	test writing

Miskolc, 11.02.2019.

Dr. Mogyoródy Ferenc
Assistant Professor