



SUBJECT DATASHEET

Semester:	2009/10/2
Subject:	Introduction to chemical engineering
Code:	VEMKTE3112A
Responsible department:	Department of Hydrocarbon and Coal Processing
Responsible department code:	MKOL
Responsible lecturer:	Dr. Norbert Miskolczi

Educational objectives:

To develop an awareness of the sources of chemical processes.

Detailed content of the subject:

1. Chemical engineering. Definition. MSc-BSc. Quality in education. Fundamentals of education. IChemE prescriptions. George Davis and Carl Duisberg and their importances. Education of Chemical Engineering in Hungary. 2. Development of chemical industry. Raw materials, energy sources, constructional materials. 3. Development of chemical industry. Production of charcoal and different metals. 4. Development of chemical industry. Silicate industry. 5. Development of chemical industry. Soap producing. Carbonization and gasification of coal. 6. Development of chemical industry. Processes for production of sulphuric acid. 7. Development of chemical industry. Processes for production of soda. 8. Development of chemical industry. Nitrogen industry. 9. Chemical plants. Units, reactors, allactors, controllers, sensors, etc. 10. Chemical plants. Units, reactors, allactors, controllers, sensors, etc. 11. Laws of chemistry and chemical industry. 12. Process and plant design. 13. Process and plant design. 14. Constructional materials and their classification. Metals, plastics, composites, etc. Properties and application of constructional materials. 15. Hazards and loss prevention

Requirements:

Lásd a TVSZ idevonatkozó pontjait.

Required and suggested references:

Wiissermel, K., Appe, H.J.: Ipari szerves kémia, Nemzeti Tankönyvkiadó, Budapest, 2003. Deák Gyula: Bevezetés a kémiai technológiába, 2004.