**Subject: Introduction to chemical engineering**

**Lecturer: Prof. Dr. Ramë Vataj**

**Course status: Obligatory**

**ECTS: 6**

**Short description of the content:** The units of the International System of units, chemical industry pumps, types of pumps, separation of heterogeneous systems (decantation, filtration, centrifugation), gas cleaning, blending in liquid medium, heat exchange, evaporation, mass exchange, absorption, distillation, rectification, liquid-liquid extraction, solid body-liquid extraction, adsorption, drying, cooling, crystallization, transport of solid materials.

**Teaching and learning methods:** Lectures, discussion, lab practice, homework, consultations, test, exams.

**Evaluation methods and passing criteria:**f irst test 20 %, second test 20 %, regular attendance 5 %, home works and other efforts 5%, final exam 50 %. Total: 100 %.

**Concretization means/ IT:** For lectures (table, computer, video projector, marker) for laboratory (tools and working equipment in the laboratory of chemistry).

**Ratio between the theoretical and practical part of teaching: 3 : 2.**

**Literature**:

1. Petrit Dodbiba ”Inxhinieria kimike 2, Proceset themelore”, ShBLU, Tiranë. 2002.
2. Felder and Rousseau, *Elementary Principles of Chemical Processes*, 3rd ed., Wiley, 2005.
3. Emilian Koller, *Aide mémoire de Génie Chimique*, 4e edition, DUNOD, 2013.