

Course title:	An introduction to cosmetic technology
Institute/Division:	FACULTY OF CHEMICAL ENGINEERING AND TECHNOLOGY
Number of contact hours:	60 hours (15 h lectures and 45 h laboratories)
Course duration:	1 semester (6 th semester of regular I cycle studies - spring)
ETCS credits:	5

Course description:

The subject of the lectures concerns the characteristics of the cosmetic products (emulsions, suspensions, foams, solutions and mixtures of powdered solids), including their physicochemical and the criteria of raw materials selection. Additionally same basis information concerning selected raw material groups will be presented. Also an information related to the cosmetics technology such as emulsification process parameters and to the methods for assessing the quality of the products will describe.

During laboratory classes selected cosmetic formulations (emulsions, shampoos, color cosmetics and toothpaste) will be prepared. Next an evaluation of the products physicochemical properties (for example: stability, viscosity measurement) will be conducted.

Education effects :

- knowledge: student knows the basic information concerning production process of the cosmetics, knows the criteria of raw materials selection and methods of studied the cosmetics quality,
- skills: student can obtain different forms of cosmetic products (emulsions, suspensions, foams) and assess their physicochemical properties, in accordance with good manufacturing practice knows the methods of handing with cosmetic raw materials, final products and waste products
- social: student is able to work independently and in the group both at the laboratories and during preparation of the report

Literature:

- [1] D.F. Williams, W.H.Schmitt - "Chemistry and Technology of the Cosmetics and Toiletries Industry.", Blackie Academic & Professional, Glasgow 1996,
- [2] T.J. Lin, Manufacturing of Cosmetic Emulsions, Alluredbooks, Carol Stream, 2009,
- [3] Ed. M.R. Rosen, Delivery System Handbook for Personal Care and Cosmetic Products -Technology, Applications and Formulations, William Andrew, Inc., Norwich, 2005
- [4] E. Sikora, Cosmetic Emulsions, Wydawnictwo PK, Krakow 2019

Assessment method:	Exam, completing the laboratories (presence and delivering of reports from each performed exercise)
Prerequisites:	Basic knowledge in organic and inorganic chemistry and technology.
Primary target group:	Students from all specialties
Lecturer:	dr inż. E. Sikora
Contact person:	esikora@pk.edu.pl
Remarks:	Regular course