

# UNIVERSITY OF WARMIA AND MAZURY Faculty of Agriculture and Forestry

86S1-ANSUKO ANALYSIS OF COSMETIC RAW MATERIALS ECTS: 3.0

**HOURS PER SEMESTER/WEEK:** LECTURES: 15/1; CLASSES: 30/2

FIELD OF THE STUDY: Chemistry

Level of study: First-cycle (Bachelor's degree) program

Course status: optional \*
Year of the study: III

#### COURSE CONTENTS

**LECTURES:** Parameters for assessing the quality of raw materials used in the production of cosmetics. Analytical methods used in the study of raw materials and durability of cosmetic products. Polish and European analytical and microbiological standards for cosmetic raw materials, requirements for a single ingredient and the finished product. Review of classical and instrumental methods used in the analysis of ingredients of individual groups of cosmetics: oils, surfactants, colour agents, preservatives, preparations with UV filters, etc.

**CLASSES:** Chemical qualitative and quantitative analysis of cosmetic ingredients, methods and interpretation of test results. Analysis of active ingredients in cosmetics. Evaluation of the quality of cosmetic raw materials such as fats, waxes and oils. Analysis of excipients used in cosmetics.

**EDUCATIONAL PURPOSE:** Acquainting with the analytical methods used in the study of raw materials and cosmetic products.

#### **LEARNING OUTCOMES**

**Knowledge.** The student lists and characterizes the raw materials used in the production of cosmetic preparations and describes and explains the phenomena and physicochemical processes that are the basis for their determination in accordance with applicable law. Knows and understands the rules of occupational health and safety in the laboratory.

**Skills.** The student is able to select and apply the appropriate technique of determination to determine the qualitative and quantitative composition of cosmetic raw materials. He can work in a small group being responsible for the tasks assigned to him. He is able to develop in an understandable way the results of experiments and present them in the form of a report. **Social competences.** The student understands the need for continuous training and improving their professional competences.

#### **TEACHING FORMS AND METHODS**

**Lectures.** Lecture with multimedia presentation.

Classes. Performing experiments, analysis of results and discussion.

### FORM AND CONDITIONS FOR VERIFICATION OF LEARNING OUTCOMES

Lectures. written test.

Classes. reports from all performed exercises.

#### **BASIC LITERATURE**

1) Salvador A., Chisvert A. (eds.) 2007. Analysis of Cosmetic Products. Elsevier

## ADDITIONAL LITERATURE

1) Dreher F., Jungman E., Sakamoto K., Maibach H.I. (eds.). 2022. Handbook of Cosmetic Science and Technology. CRC Press

#### THE TEACHER/TEACHERS CONDUCTING THE CLASSES:

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<sup>\*</sup> note: optional course availability depends on Polish students' choice!