

UNIVERSITY OF WARMIA AND MAZURY Faculty of Agriculture and Forestry

86S1-GIPAFSCH

ECONOMIC AND POLITICAL ASPECTS OF THE ECTS: 3.0 CHEMICAL SECTOR

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

FIELD OF THE STUDY: Chemistry

Course status: optional *
Year of the study: III

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

COURSE CONTENTS

LECTURES: Legislation and legislation for the industry in Poland. The economic situation of the chemical industry. Strategic producers in the chemical industry. Basic financial ratios. Production of the chemical industry in Poland and in the world. Price dynamics of chemical products. Labor market. Trade in chemical products with other countries. Capital expenditures in the chemical industry. Innovative activity in the chemical industry. The importance of clusters in the chemical industry. Selected problems of the chemical sector in Poland and in the world. Chemical industry and environmental protection. The past of the chemical industry.

CLASSES: Characteristics of Polish and foreign companies in the chemical industry. SWOT analysis of the chemical sector. Innovative products of the chemical industry. Ecological technologies and raw materials in the chemical industry. Chemical industry for various purposes. Auxiliary chemicals industry for other industries. Household chemicals and perfumery and cosmetics industry. Paint and varnish industry. Pharmaceutical industry. Rubber industry. Coke industry. Production of coke products. Fertilizer industry and chemical compound feed ingredients. Inorganic industry. Production of inorganic compounds. organic industry. Petrochemical industry. Plastics industry. Chemical fiber industry. Plastic products industry. Herbal industry.

EDUCATIONAL PURPOSE: Presentation of the importance of the chemical sector in Poland and in the world and various aspects of its functioning.

LEARNING OUTCOMES

Knowledge. The student resents and describes the main problems of the chemical sector in Poland. Student lists and describes the branches of the chemical industry.

Skills. Student conducts a strategic analysis of the Polish chemical industry. Student shapes the attitude of responsibility for the natural environment.

Social competences. Student shapes the attitude of responsibility for the natural environment. Student cooperates with other members of the academic community.

TEACHING FORMS AND METHODS

Lectures. Information lecture with multimedia presentation.

Classes. Laboratory classes - performing laboratory tasks in small teams of 2.

FORM AND CONDITIONS FOR VERIFICATION OF LEARNING OUTCOMES

Lectures. written test with open questions.

Classes. Preparation of a paper and its presentation in class.

BASIC LITERATURE

1) Bobryk E., Schmidt-Szałowski K., Sentek J., Szafran M. 2013. Technologia chemiczna, Wydawnictwo Naukowe PWN

ADDITIONAL LITERATURE

1) Przemysł chemiczny w Polsce. Wydawnictwo Czasopism i Książek Technicznych SIGMA-NOT Spółka z o.o

THE TEACHER/TEACHERS CONDUCTING THE CLASSES:

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^{*} note: optional course availability depends on Polish students' choice!