forea@kpi.ua www.forea.kpi.ua (+38 044) 454 91 99

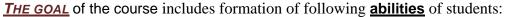


## **COURSE:** Additional chapters of Organic Chemistry

LECTURERS: Tatyana Zhuk, Ph. Lesya Chernysh, Ph. D

LANGUAGES OF EDUCATION: Russian, English

SUBJECT of the educational course: study of synthetic methods and chemical transformations of chemical compounds, methods for their isolation and purification from the mixture and testing the purity of the compounds obtained.



- ability to distinguish the classes of organic compounds;
- to be able to identify the correlation between the classes and the homologous series of organic compounds:
- ability to carry out the conversion of organic compounds;
- ability to predict the properties of organic compounds by their structure;
- ❖ ability to detect the structure of organic compounds on their properties;
- ability to plan the scheme for the synthesis of complex organic compounds from simple;
- \* knowledge of the safety rules during the work in the laboratory of organic chemistry;
- ❖ ability to predict the practical use of organic substances;
- ❖ ability to conduct experiments to identify the chemical properties of organic compounds;
- ability to allocate from mixtures of organic substances;
- ability to determine the purity of the organic substances.

## MAIN TASK OF EDUCATIONAL COURSE

In accordance to demands of educational-professional program, after the finishing of this course must Skills:

## Knowledge:

- ✓ of general concepts of chemistry of organic compounds;
- ✓ of the basis of mechanisms of organic reactions;
- ✓ of the range of organic substances;
- ✓ of various classes of organic compounds;
- ✓ of basic methods for different classes of organic compounds:
- ✓ of the reactivity of different classes of organic compounds:
- ✓ of the correlation between the various classes of organic compounds;
- ✓ of general concepts on how to clean organics;
- ✓ of setting the purity of organic compounds in different aggregate states;
- ✓ of the work safety in the laboratory of organic substances:
- ✓ of practical use of organic substances.

demonstrate such learning outcomes:

- ✓ to plan synthesis of organic compounds;
- ✓ to identify the connection between classes of organic compounds and convert them;
- ✓ of planning purification of organic compounds;
- ✓ to establish the purity of organic compounds;
- ✓ to predict the practical use of organic substances.

## Experience:

of conducting experiments on the synthesis, isolation and purification of organic compounds.

**COURSE DURATION:** 36 academic hours of laboratory works **REQUIREMENTS**: knowledge in the field of organic chemistry, General and Inorganic Chemistry, Analytical Chemistry

