Course Unit Descriptor

Study Programme: Chemistry

Course Unit Title: Steroid Chemistry

Course Unit Code: IHO-403

Name of Lecturer(s): Assistant professor Aleksandar Oklješa

Type and Level of Studies: Bachelor Academic Studies

Course Status (compulsory/elective): Elective

Semester (winter/summer): Summer

Language of instruction: English

Mode of course unit delivery (face-to-face/distance learning): Face-to-face

Number of ECTS Allocated: 6

Prerequisites: None

Learning objectives

The goal of the course is to obtain knowledge of steroids' structures, their modifications and reactivity. Gaining knowledge and skills in planning of synthetic routes to modified steroid analogues.

Learning outcomes

After successfully completing the course, the student is able to devise synthetic routes from naturally occurring steroids to desired steroidal derivatives.

Syllabus

Theoretical instruction

Sources of steroids. Reaction and conformational analysis. Reactions of alcohols and halides. Steroid olefins. Steroid ketones. Steroid amines. Rearrangements of steroid derivatives. Synthesis of biologically active steroidal derivatives.

Practical instruction

Laboratory synthesis of steroidal derivatives.

Required Reading:

1. Weekly teaching load

Weekly Contact Hours: 75	Lectures: 30	Practical work: 45
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Teaching Methods:

Lectures and laboratory work

Knowledge Assessment (maximum of 100 points): 100

Pre-exam obligations	points	Final exam	points
Activity	10	Written exam	40
Lab exercises	20	Oral exam	30