

Level: PhD				
Course title: Steroid Biochemistry-selected chapters (DSB-613)				
Status: elective				
ECTS: 15				
Requirements:				
Learning objectives Increase students' knowledge of the biosynthetic routes and the physiological effects of certain classes of steroids. Develop students' ability to apply standard methods to solve problems in the field of biochemistry of steroids and their synthetic analogues, but also to create new, appropriate methods to resolve current problems and tasks. To enable students to plan and carry out experiments to process the results and discuss them critically.				
Learning outcomes After successful completion of the course the student is able to: Explain the role of certain classes of steroids in physiological and / or pathological processes; Explain the role of endogenous and exogenous factors in the changes in the biosynthesis and / or action of steroids; Critically represent view on the importance of certain steroids and feasibility of use of commercial products for therapeutic or other purposes; Choose the relevant scientific literature and prepare a presentation on the topic; Modify existing methods, performing tests to quantify the physiological effects of steroids and critically interpret the results; Independently plan and perform experiments.				
Syllabus <i>Theoretical instruction</i> Class of steroids: sterols, vitamin D, steroid sapogenins, steroid alkaloids, cardiac glycosides, bile acids, progestins, corticosteroids, androgens, estrogens: metabolism, mode of action and physiological effects, regulation of biosynthesis. Compounds that modify the synthesis or action of certain classes of steroids, natural and synthetic origin.				
Weekly teaching load				Other:
Lectures: 5	Exercises:	Other forms of teaching:	Student research: 5	