



Detailed Course Syllabus

Academic Year 2023. / 2024.		Semester		Winter
Study Program	Undergraduate Study	Specialization/ Major in	For Student Incoming Mobility	Year of Study 1-3

I. BASIC COURSE INFORMATION

Name	Hormones and Behavior		
Abbreviation	IZBEPSIH3	Code	251847
Status	Elective	ECTS	3
Prerequisites	None		
<i>Total Course Workload</i>			
Teaching Mode	Total Hours	Teaching Mode	Total Hours
Lectures	15	Seminars	15
Class Time and Place	HKS - according to the published schedule		

II. TEACHING STAFF

<i>Course Holder</i>			
Name and Surname	Maja Jazvinščak Jembrek		
Academic Degree	PhD	Professional Title	Associate Professor
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Office Hours	According to the published schedule		

III. DETAILED COURSE INFORMATION

Teaching Language	English
Course Description	<p>Course objectives: The aim of the course is to understand the interaction of the endocrine and nervous systems in the regulation of behavior. The effects of hormones on sexual differentiation, reproductive, parental and social behavior will be presented in more details, as well as the effects of hormones in maintaining homeostasis and stress response, cognitive functions and mood disorders.</p> <p>Course content: Behavioral endocrinology - interactions of hormones and behavior and research methods; Endocrine system and hormones (chemical structure, mechanisms of action); Sex determination and differentiation (organizing and activating effects of sex hormones, environmental factors in sex differentiation); Gender differences in brain structures, behavior and cognitive abilities; Female and male reproductive behavior (neural mechanisms); Parental behavior; Effects of hormones on social behavior (affiliation, aggression); Principles of homeostasis and effects of hormones in maintaining energy balance (control of food intake); Types of biological rhythms, effects of biological rhythms on hormones and</p>

behavior; Physiological and pathophysiological effects of hormones in stress; Effects of hormones on learning and memory (with reference to gender differences); Effects of hormones on affective disorders (depression, eating disorders)

Expected Educational Outcomes

Describe the basic principles of interaction between the endocrine and nervous systems in the regulation of behavior. Explain the role of hormones in sexual differentiation and gender differences in behavior. Explain the regulatory effects of hormones on certain types of behavior in physiological and pathophysiological conditions. Explain the contribution of hormones in the development of psychological disorders. Present the results of scientific research in the field of endocrinology of human behavior. Discuss the advantages and disadvantages of existing approaches in the research of neuroendocrinology of human behavior.

Textbooks and Materials

Required Nelson, R.J.& Kriegsfeld, L.J. (2017). *An Introduction to Behavioral Endocrinology. Fifth Edition.* Sinauer Associates.

Supplementary Relevant scientific articles and selected chapters from books covering topics in behavioral endocrinology

Examination and Grading

To Be Passed	Yes	Exclusively Continuous Assessment		Included in Average Grade	Yes
		No			
Prerequisites to Obtain Signature and Take Final Exam		<ul style="list-style-type: none"> - Class attendance (at least 70% of classes) - Obtaining a minimum of 35% points (out of a total of 100 points) during classes (cumulatively achieved by seminar presentation and at two colloquiums) - Completed seminar obligations (seminar prepared and presented) 			
Examination Manner	Continuous evaluation of student work through teaching activities (seminar presentation; two colloquiums (written form)) Final written exam (minimum for passing the written exam is 50% of correct answers).				

Teaching activities:

- Seminar presentation - max. 10 points (presentation on time - max. 2 points; quality of presentation - max. 4 points; level of complexity on the topic - max. 4 points)
- 1st colloquium - max. 30 points
- 2nd colloquium - max. 30 points
- Final written exam - 30% of the grade (max. 30 points; 50% of the exam must be completed to pass)

Grading Manner

Numerical grading scale for student work:

- excellent (5) - 90 to 100% points
- very good (4) - 80 to 89.9% points
- good (3) - 65 to 79.9% points
- sufficient (2) - 50 to 64.9% points
- insufficient (1) - 0 to 49.9% points

Detailed Overview of Grading within ECTS

ACTIVITY	ECTS grading scale	% of final grade
Class attendance	0.8	0

Seminar presentation	0.66	30
1st colloquium	0.66	30
2st colloquium	0.66	30
Total through teaching activities	2.34	70
Final exam	0.66	30
TOTAL	3	100

Midterm Exam Dates	8 th and 14 th week of the course
Final Exam Dates	According to the published schedule

IV. WEEKLY CLASS SCHEDULE

Lectures

Week	Topic
1.	Introductory lecture
2.	Study of behavioral endocrinology
3.	The endocrine system
4.	Sex determination and differentiation
5.	Sex differences in behavior: animal models and humans
6.	Male reproductive behavior
7.	Female reproductive behavior
8.	Parental behavior
9.	Hormones and social behavior
10.	Homeostasis, hormones and behavior
11.	Hormones and biological rhythms
12.	Psychoneuroendocrinology: hormones and stress
13.	Hormones and cognitive processes
14.	Hormones and affective disorders
15.	Final lecture

Seminars

Week	Topic
1.	Seminar presentations related to lecture topic
2.	Seminar presentations related to lecture topic
3.	Seminar presentations related to lecture topic
4.	Seminar presentations related to lecture topic
5.	Seminar presentations related to lecture topic

6.	Seminar presentations related to lecture topic
7.	Seminar presentations related to lecture topic
8.	Colloquium 1
9.	Seminar presentations related to lecture topic
10.	Seminar presentations related to lecture topic
11.	Seminar presentations related to lecture topic
12.	Seminar presentations related to lecture topic
13.	Seminar presentations related to lecture topic
14.	Colloquium 2
15.	Seminar presentations related to lecture topic