

The Hebrew University of Jerusalem

Syllabus

PSYCHOBIOLOGICAL PROCESSES - 51537

Last update 07-11-2016

HU Credits: 3

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: psychology

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Yehuda (Udi) Shavit

Coordinator Email: udi.shavit@mail.huji.ac.il

Coordinator Office Hours: Tuesday, 9-10

Teaching Staff:

Prof Yehuda Shavit

Course/Module description:

This course is a continuation and extension of the course entitled "Biological Foundations of Behavior" (which is a prerequisite course). The course will focus on the following subjects: Biological cycles and sleep, Hormones and sexual behavior, Emotions (including stress disorders), Learning and memory, and Biological aspects of mental disorders.

Course/Module aims:

The course aim is to demonstrate how biological processes are involved in all aspects of behavior in humans and non-humans animals. The course examines interactions among the central nervous system, autonomic nervous system, and the neuroendocrine system and their effects on behavior, and vice versa.

Learning outcomes - On successful completion of this module, students should be able to:

Develop a firm understanding of biological processes and their impact on behavior

Describe central research methods in Psychobiology

Describe biological rhythms, sleep cycles, and neuronal regulation of these rhythms.

Describe the role of effects of hormones on the nervous system and on behavior.

Describe how genes can influence behavior.

Describe biological mechanisms underlying learning and memory.

Describe biological processes underlying mental health diseases, such as schizophrenia and depression.

Evaluate the bidirectional communication between behavior and biological processes.

Demonstrate critical thinking about the interactions between biological mechanisms and behavior.

Attendance requirements(%):

80

Teaching arrangement and method of instruction: Lecture, submitting online assignments

Course/Module Content:

Sleep and Biological Rhythms

Reproductive Behavior

Emotion + Stress Disorders
Learning and Memory
Schizophrenia and Affective Disorders

Required Reading:

Carlson, N. R. Physiology of Behavior, 10th Edition, Allyn & Bacon, 2010.

Ch. 9: Sleep and Biological Rhythms
Ch. 10: Reproductive Behavior
Ch. 11: Emotion + Stress Disorders (Pages: 601-612)
Ch. 13: Learning and Memory
Ch. 16: Schizophrenia and Affective Disorders

Additional Reading Material:

Course/Module evaluation:

End of year written/oral examination 90 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 10 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %

Additional information: