

# The Hebrew University of Jerusalem

# Syllabus

# The Involvement of the Endocannabinoid System in Health and Disease - 64891

Last update 27-08-2021

HU Credits: 2

<u>Degree/Cycle:</u> 2nd degree (Master)

Responsible Department: School of Pharmacy

Academic year: 0

Semester: 2nd Semester

<u>Teaching Languages:</u> Hebrew

Campus: Ein Karem

Course/Module Coordinator: Prof. Yossi Tam

<u>Coordinator Email: yossi.tam@mail.huji.ac.il</u>

Coordinator Office Hours: By appointment only

<u>Teaching Staff:</u> Prof Yossi Tam, Prof Sara Eyal

## Course/Module description:

The course deals with various aspects of the endocannabinoid system in health and disease. The course will be given a broad overview on the development of the research done on the endocannabinoid system, identification of the active components in the cannabis plant, through the identification of cannabinoid receptors to the characterization of various endogenous ligands of the system (Classic endocannbinoids, and cannabinoid-like substances). After recognition of the endocannabinoid system on its various components, we will review several research areas dealing with the involvement of the endocannabinoid system in physiological and pathological processes, such as: metabolism, bone diseases, pain, brain trauma, cancer, microbiology, and more.

#### Course/Module aims:

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

At the end of this course, students will be able to:

- Recognize the various components of the endogenous and exogenous cannabinoid system.
- Recognize the diverse research done in the context of the endocannabinoid system.
- Distinguish between the physiological effects of the cannabis plant and the endocannabinoid system.
- Describe the potential involvement of the endocannabinoid system in their personal research interest.

#### Attendance requirements(%):

100% in all classes and seminars

Teaching arrangement and method of instruction: Lectures and Seminars

#### Course/Module Content:

- 1. Cannabis and Endocannabinoids
- 2. Metabolic diseases (obesity, diabetes, NAFLD)

- 3. Head Trauma
- 4. Pain
- 5. Bone and cartilage
- 6. Cancer
- 7. Kidney Diseases
- 8. Epilepsy
- 9. GvHD
- 10. Addiction
- 11. Various subjects related to the research interests of the students attending the course

#### Required Reading:

Bibliography will be chosen individually and personally for each one of the students participating in the course, depending on their personal seminar.

### Additional Reading Material:

# Course/Module evaluation:

End of year written/oral examination 0 %
Presentation 50 %
Participation in Tutorials 0 %
Project work 50 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 0 %
Other 0 %
home exam

# Additional information: