

# *The Hebrew University of Jerusalem*

## *Syllabus*

### *Medical imaging principles - 64710*

*Last update 09-09-2021*

*HU Credits: 1*

*Degree/Cycle: 1st degree (Bachelor)*

*Responsible Department: School of Pharmacy*

*Academic year: 0*

*Semester: 1st Semester*

*Teaching Languages: Hebrew*

*Campus: Ein Karem*

*Course/Module Coordinator: Ofer Shamni*

*Coordinator Email: [ofer.shamni@mail.huji.ac.il](mailto:ofer.shamni@mail.huji.ac.il)*

*Coordinator Office Hours: Wednesday, 15:00-16:00*

*Teaching Staff:*

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Dr. Ofer Shamni

Course/Module description:

The course will give an overview of widely used medical imaging methods and general basic concepts for medical imaging (X-ray radiography, CT, MR, US). The course will detail the rising importance of nuclear medicine in medical imaging and its benefits.

The course will give an overview of main radioisotopes in the use of nuclear medicine, and main PET-tracers that are currently in clinical use in nuclear medicine imaging, with a vision of the future.

Course/Module aims:

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

Basic concepts in medical imaging  
Main methods of medical imaging and the principles on which they are based on PET principles

Attendance requirements(%):

80%

Teaching arrangement and method of instruction: Frontal teaching, reading literature

Course/Module Content:

Review of medical imaging methods.  
Basic concepts in medical imaging.  
Introduction to PET CT  
Radioisotopes in nuclear medicine.  
PET tracers overview

Required Reading:

Will be given during the course

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Additional Reading Material:

Course/Module evaluation:

End of year written/oral examination 100 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 0 %

Reports 0 %

Research project 0 %

Quizzes 0 %

Other 0 %

Additional information: