



# *The Hebrew University of Jerusalem*

## *Syllabus*

### *The digestive system - from structure to function in the healthy human being - 96203*

*Last update 02-09-2021*

*HU Credits: 3.5*

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

*Responsible Department: Medicine*

*Academic year: 0*

*Semester: 1st Semester*

*Teaching Languages: Hebrew*

*Campus: Ein Karem*

*Course/Module Coordinator: Dr. Einav Gross*

*Coordinator Email: [einavg@ekmd.huji.ac.il](mailto:einavg@ekmd.huji.ac.il)*

*Coordinator Office Hours: Sunday 16:00 -18:00*

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Teaching Staff:

Dr. Einav Gross,  
Prof EYAL SHETAYER,  
Dr. Michal Shoshkes-Carmel,  
Dr. Dan Ben Zvi,  
Dr. Moran Yassour,  
Dr. Tamar Sella

Course/Module description:

The digestive system is one of the most complex systems in the human body. In this course the students will learn about the structure and function of the digestive system. In addition, the students will learn about cutting edge subjects such as the oral cavity and gut microbiome. The course consists of frontal lectures, problem based learning, self-study, classroom exercises and online content.

Course/Module aims:

The aim of the course here is instilling knowledge and skills necessary to understand the structure and activity of digestive tract in healthy person. This knowledge is essential for the understanding of pathophysiological conditions in the sick person.

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

Studying the digestion block allow students:

- 1) To understand the interaction of structure-function of the digestive system and how they serve it.
- 2) Understanding the complexity of the digestive system microbiome and its interaction with the human cells.
- 3) Interpreting the results of imaging of the digestive system using dedicated software.
- 4) Acquiring tool for self-learning through project-based learning (PBL).

Attendance requirements(%):

Full attendance

Teaching arrangement and method of instruction: Teaching methods include frontal teaching, working in small groups, online teaching and problem based learning projects.

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Course/Module Content:

*Anatomy (10 hours frontal and 24 hours' laboratory).*

*Histology (8 hours frontal and 4 hours' laboratory).*

*Physiology (8 hours frontal).*

*Frontiers in Microbiome research of the digestive system (two frontal).*

*Hepatic Physiology (3 hours frontal).*

*Gastrointestinal Imaging (4 hours, online learning).*

*PBL (4 hours of project-based learning).*

Required Reading:

*Histology: A Text and Atlas, with Correlated Cell and Molecular Biology, 6th Edition*

*Tortora & Derrickson; Principles of Anatomy and Physiology*

Additional Reading Material:

*Berne and Levy Physiology 6th edition*

*Guyton and Hall Textbook of Medical Physiology, 12th Edition (earlier editions could also be used)*

Course/Module evaluation:

*End of year written/oral examination 64 %*

*Presentation 0 %*

*Participation in Tutorials 0 %*

*Project work 0 %*

*Assignments 15 %*

*Reports 0 %*

*Research project 0 %*

*Quizzes 0 %*

*Other 21 %*

*Practical exam in Anatomy*

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Additional information:

None