

The Hebrew University of Jerusalem

Syllabus

Structure & Function of Biomolecules - 94650

Last update 17-03-2020

HU Credits: 3.5

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Bio-Medical Sciences

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator: Dr Reuven Wiener

Coordinator Email: ReuvenW@ekmd.huji.ac.il

Coordinator Office Hours: By Appointment

Teaching Staff:

Dr. Reuven Wiener
Dr. Yoav Saul
Ms. Mona Hijazy
Ms. Klil Cohen

Course/Module description:

Structure and Functions of Biomolecules and their cellular regulation : Structure of Amino acids, Peptides, Proteins (Collagens, Different Oxygen Binding Proteins- Myoglobin, Hemoglobin A, A2, F and S, Lipids, Carbohydrates, Biological Membranes, Zymogens- Enzymes and Enzyme Kinetics. Nucleotides, DNA, RNA structure and function.

Course/Module aims:

To get familiar with the different Biomolecules and to understand the molecular basis of their function and cellular regulation

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

The students should be able to analyze the molecular basis of the specific function of the different molecules and their regulation in the cell.

Attendance requirements(%):

Teaching arrangement and method of instruction: Lectures and Exercises

Course/Module Content:

Lehninger 6th edition Chapters 3,4,5,6,7,9,10,11

Required Reading:

*Appropriate Chapters in Lehninger Principles of Biochemistry ,
6th Edition*

Additional Reading Material:

Appears in Med. School Edu Portal

Course/Module evaluation:

End of year written/oral examination 85 %

Presentation 0 %

Participation in Tutorials 0 %

Project work 0 %

Assignments 15 %

Reports 0 %

Research project 0 %

Quizzes 0 %

Other 0 %

Additional information: