האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

CHEMISTRY LAB. FOR MEDICAL SCIENCES STUDENTS - 69160

Last update 10-03-2022

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Chemistry

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Prof. Gil Shoham

Coordinator Email: gil2@vms.huji.ac.il

Coordinator Office Hours: By appointment

Teaching Staff:
Prof Gil Shoham

Course/Module description:
The course comprises of six lab sessions of 5hr. each dedicated to the study of general and analytical chemistry and organic chemistry.

Course/Module aims:
Acquiring basic laboratory skills and techniques to Medical Science students.

Learning outcomes - On successful completion of this module, students should be able to:
1. Perform basic laboratory work by using instruments and lab equipment.

2. Gain "hands-on" experience in lab work - preparation, conducting and summarizing experiments.

3. Deepen understanding and knowledge in specific subjects in general chemistry.

4. Prepare for specific experiments in general and analytical chemistry.

5. Perform independently (but guided) basic experiments in analytical chemistry.

6. Analyze and criticize the final results obtained in a simple experiment.

Attendance requirements(%):
100%

Teaching arrangement and method of instruction: Laboratory.

Preparing the lab-exercise through reading the lab booklet,quiz and colloquium prior to the practical work.

Course/Module Content:
Part A – Acid-Base titrations. Determination of vitamin C by iodometric titration, Determination of calcium and magnesium by EDTA titration, Spectrophotometric, determination of dissociation constant of an indicator.

Part B – Alkenes, Carboxilic acids and their derivatives, Cis-trans isomerization.

Required Reading:
Lab booklet "laboratory in basic chemistry for Medical Sciences students" and relevant literature within.
Relevant material in organic chemistry in the course website.

Additional Reading Material:

Course/Module evaluation:
End of year written/oral examination 0 %
Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 25 %
Research project 0 %
Quizzes 25 %
Other 50 %
See Below: Extra Informaion

Additional information:
Final Grade consists of quiz, colloquium, instructor assessment of performance and final report. Different weights may be used in each lab.