



The Hebrew University of Jerusalem

Syllabus

bioorganometallic chemistry: from biological sys - 64807

Last update 21-07-2013

HU Credits: 2

Degree/Cycle: 1st degree (Bachelor) and 2nd degree (Master)

Responsible Department:

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: Ein Karem

Course/Module Coordinator:

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

Coordinator Office Hours:

Teaching Staff:

Dr. Dmitry Tsvelikhovsky

Course/Module description:

The course is used to highlight the diversity and strength of organometallics in biological and medicinal spheres.

The content of the course will demonstrate the biological and medicinal utilization of organometallic species including main-group-metal and early-transition-metal complexes, as well as the better-known later-transition-metal complexes, focusing on their structural types and a wide range of applications.

The course is not merely welcome source of information, but one that stimulates the field of biological-organometallic chemistry field further, motivating students to use their skills and knowhow to solve problems in chemistry, biology and medicine.

Course/Module aims:

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

Attendance requirements(%):

Teaching arrangement and method of instruction: ppt

Course/Module Content:

Some of the topics to be discussed:

- Metal-ligand bonding
- Organometallic targets to specific biological sites (development of novel therapies)
- Labeling of proteins with organometallic complexes
- Organometallic bio-probes
- Genosensors based on metal complexes

Required Reading:

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: