The Hebrew University of Jerusalem

Syllabus

ASTROPHYSICS AND LIFE IN THE UNIVERSE - 77210

Last update 23-07-2020

HU Credits: 3

Degree/Cycle: 1st degree (Bachelor)

Responsible Department: Physics

Academic year: 0

Semester: 1st Semester

Teaching Languages: Hebrew

Campus: E. Safra

Course/Module Coordinator: Amri Wandel

Coordinator Email: amri@huji.ac.il

Coordinator Office Hours: By appointment

Teaching Staff:

Dr. Amri Wandel

Course/Module description:

The course aims to give a broad introduction to Astrophysics at a level appropriate (also) to non- physics students.

Course/Module aims:

To become familiar with the recent working methods of astrophysics and astrobiology

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

Understanding and properties of our Solar System, stellar properties and evolution, galaxies, the universe and the theory of the Big Bang, astrobiology and the search of exoplanets and life.

Attendance requirements(%):

50

Teaching arrangement and method of instruction: lecture. Optional - visit to an observatory and sky watch.

Course/Module Content:

The Solar System, extra-solar planets, stars and their evolution, galaxies, cosmology. Astrobiology - the quest for life, from Earth to the Solar System and distant wolds.

Required Reading:

Secrets of the universe - a window to Astronomy, Meidav, Brosh & Netzer 2013; Life in the universe (Bennett & Shostak 2017)

Additional Reading Material:

The Journey to Enlightment (Ami Ben Bassat and Hagai Netzer); Introd. to Astrobiology (Gilmour & Sephton);Universe - Kaufmann

Course/Module evaluation:

End of year written/oral examination 70 %

Presentation 0 %
Participation in Tutorials 0 %
Project work 0 %
Assignments 0 %
Reports 0 %
Research project 0 %
Quizzes 20 %
Other 10 %
Reading report

Additional information:
Computerized exam
Home quizz