האוניברסיטה העברית בירושלים
THE HEBREW UNIVERSITY OF JERUSALEM

The Hebrew University of Jerusalem

Syllabus

APPLIED PROBABILITY - 52819

Last update 30-07-2021

HU Credits: 3

Degree/Cycle: 2nd degree (Master)

Responsible Department: Statistics

Academic year: 0

Semester: 2nd Semester

Teaching Languages: Hebrew

Campus: Mt. Scopus

Course/Module Coordinator: Prof. Offer Kella

Coordinator Email: offer.kella@gmail.com

Coordinator Office Hours: By appointment

Teaching Staff:

Prof Offer Kella

Course/Module description:
This course is intended to develop the knowledge of the students in stochastic processes and models with an emphasis on queueing theory.

Course/Module aims:
To prepare the students for research in applied probability, in general and in queueing theory in particular

Learning outcomes - On successful completion of this module, students should be able to:
To be able to understand research papers in applied probability and to enable the students begin to develop learning and research skills in the area.

Attendance requirements(%):
no

Teaching arrangement and method of instruction: Frontal teaching, exercise classes and weekly homework exercises.

Course/Module Content:
Little's formula, Renewal theory,continuous time Markov chains. Queueing theory: single server queues, open and closed networks of queues.

Required Reading:
None.

Additional Reading Material:
Soren Asmussen, Applied Probability and Queues, 2nd Edition, Springer

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:
Prerequisites:
52817 - Probability and Stochastic Processes.