

# *The Hebrew University of Jerusalem*

## *Syllabus*

### *Practical approach to actuarial risk management - 52720*

*Last update 19-01-2016*

*HU Credits:* 2

*Degree/Cycle:* 1st degree (Bachelor)

*Responsible Department:* statistics

*Academic year:* 0

*Semester:* 2nd Semester

*Teaching Languages:* English

*Campus:* Mt. Scopus

*Course/Module Coordinator:* Prof Benjamin Yakir

*Coordinator Email:* [benjamin.yakir@gmail.com](mailto:benjamin.yakir@gmail.com)

*Coordinator Office Hours:* Mondays to Wednesdays or by appointment

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Teaching Staff:

Prof Benjamin Yakir

Course/Module description:

Basic introduction into actuarial education

Course/Module aims:

Introduce students to the content of actuarial education. The course will give an overview of the topics that are taught in our actuarial program.

It is aimed to prepare the student for the actuarial professional and the answer question such as 'what is it all about?' Even though all students are welcome the course is designed especially for those students who consider actuary as a career option.

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

1. Read questions from the different examinations of actuary (CT1, CT4, CT5, CT6, CT8) and explain the meaning the content of the questions (without solving them).
2. Read and solve questions from the examination of statistics (CT3).
3. Outline the content of the different examinations (CT1, CT3, CT4, CT5, CT6, CT8).

Attendance requirements(%):

None

Teaching arrangement and method of instruction: Lecture (in English)

Course/Module Content:

1. (CT1) Financial Mathematics: Basic tools for financial computation.
2. (CT2) Finance and Financial Reporting: Will not be presented.
3. (CT3) Probability and Mathematical Statistics: Fundamentals of probability and statistical theory.
4. (CT4) Models: Random processes, Markov processes, survival analysis.
5. (CT5) Contingencies: Statistical models for life insurance.
6. (CT6) Statistical Models: Statistical models for elementary insurance.
7. (CT7) Business Economics: Will not be presented.

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8. (CT8) *Financial Economics: Assessing financial risk.*

Required Reading:

*Actuarial examinations from previous years.*

Additional Reading Material:

Course/Module evaluation:

*End of year written/oral examination 70 %*

*Presentation 0 %*

*Participation in Tutorials 0 %*

*Project work 0 %*

*Assignments 30 %*

*Reports 0 %*

*Research project 0 %*

*Quizzes 0 %*

*Other 0 %*

Additional information:

*One may answer the final exam and the homework assignments in Hebrew.*