



# *The Hebrew University of Jerusalem*

## *Syllabus*

### **NUMERIC ANALYSIS - 80301**

*Last update 01-09-2021*

*HU Credits:* 2

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

*Responsible Department:* Mathematics

*Academic year:* 0

*Semester:* 1st Semester

*Teaching Languages:* English

*Campus:* E. Safra

*Course/Module Coordinator:* Prof Raz Kupferman

*Coordinator Email:* [raz@math.huji.ac.il](mailto:raz@math.huji.ac.il)

*Coordinator Office Hours:* Coordination via email

*Teaching Staff:*

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Prof Raz Kupferman

Course/Module description:

Introduction to numerical analysis.  
Numerical linear algebra.  
Approximation theory.  
Interpolation.  
Numerical integration.  
Additional topics might be taught.

Course/Module aims:

same as in learning outcomes.

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

- Ability to prove and apply the theorems presented in the course.
- Ability to apply correctly the mathematical methodology in the context of the course.
- Acquiring the fundamentals as well as basic familiarity with the field which will assist in the understanding of advanced subjects.
- Ability to understanding and explain the subjects taught in the course.
- Write simple code performing numerical simulations.
- Communicate in English both orally and in writing.

Attendance requirements(%):

0

Teaching arrangement and method of instruction: Frontal teaching.

Course/Module Content:

Introduction to numerical analysis.  
Numerical linear algebra.  
Approximation theory.  
Interpolation.  
Numerical integration.

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*Additional topics might be taught.*

*Required Reading:*

*none*

*Additional Reading Material:*

*Lecture notes in courses's website.*

*Course/Module evaluation:*

*End of year written/oral examination 80 %*

*Presentation 0 %*

*Participation in Tutorials 0 %*

*Project work 0 %*

*Assignments 20 %*

*Reports 0 %*

*Research project 0 %*

*Quizzes 0 %*

*Other 0 %*

*Additional information:*

*The course will be conducted in English, including assignments and final exam.*