Instructions for submitting HW in the course Numerical Methods for Engineers

General

Homework assignments are meant to practice the student in the course material and to simulate conditions of uncertainty in the results, which often occur in research.

Submission policy

- 1. Submission is in pairs only. Only one of the partners should submit.
- 2. You may submit in Hebrew or English.
- 3. Submit the HW through Moodle, in the appropriate assignment submission link.
- 4. Body of work should be in ONE .pdf format. Additionally, you need to submit all relevant files (Matlab code and user-functions or other files) in a separate .zip file.
- 5. All files submitted (i.e. pdf and zip) should be named in the following format: hw# idNumber1 idNumber2

Body of work key-points

- 1. All important code sections, all graphs and all explanations should be in the PDF file. Write the PDF as if your Matlab files will not be executed.
- 2. All Matlab code should be legible, commented and parsed to sections. Disorganized code hinders checking the HW and may lower your score.
- 3. Check that your code works before submitting! (Use the *clear; close all;* commands).
- 4. **Do not** copy your entire code to the pdf document.
- 5. If the answer to some question is a numerical result, you need to accompany it with words.
 - For example, write: the number of roots found by the Mole method is 5 (do not write only "5").
- 6. If asked for graphical representations, you need to give some written background and explanation (your interpretation).
 - For example, Graph 2 presents the calculation speed versus the size of matrix A. The size of A apparently does **not** affect substantially on the calculation speed.
- 7. All graphics should be legible. For example, you need to give captions, axis names, legend, grid, units and any other information needed to understand your graphical elements.
- 8. After writing the results, you need to write a short "discussion and conclusion" paragraph (in each chapter or at the bottom of the work, as you want), where you compare results to theory; write conclusions; or give other feedback. For example, In this chapter we compared the calculation speed of a 75-equation system in three methods, A, B and C. We found that A was the fastest but also the most time-consuming in programming. Method B was and C was..... Thus, if many calculations needed, A is the preferable method. For few calculations or to get a sensation of the solution, method C is preferable.
- 9. Name your Matlab files that call functions with meaningful names. For example, hw2 Q1.m, hw3 Q1 1.m
- 10. If you use an external source information (diagram, **piece of code**, figure, etc.), you must cite it in name and add a link. The same applies if you state a fact. For example, The figure is taken from: www.ilovestudyingNumericalmetho.ds, **or**, the code is taken from www.matlabrocks\ilove.it