Regulations for Homework Assignments

February 17, 2025

The aim of the homework assignments in the course IEM is to help you understand the physics discussed in class, and develop numerical skills towards simple modeling problems. In order to gain maximal outcome from the homework, we kindly ask you to follow the regulations as listed below

1 Contents and Format

Your solutions to the homework assignments can be in either hand-written or typeset, and they should contain:

- 1. Detailed solutions to each questions, including the derivations steps that you think important.
- 2. Figures with proper labeling, distinguishable markers and a descriptive caption.
- 3. Describe what you observe from your code-generated figures. Are the results reasonable? When submitting your solutions, please do the following:
- 1. **Hand-written version**: Please take a picture or scan your hand-written solution and make sure that the images are clear enough for reading. You can do that using a mobile scanner app like Microsoft OfficeLens. You may also send your numerical codes (in a zipped archive) to the TA by email.
- 2. **Electronic version**: Please send the homework via email to mailto:bdalla@student. ethz.ch, with all files (report, codes) you wish to hand in a zipped archive. The report should be a single pdf file with all figures included.

2 Collaboration and Group Work

In principle, discussion with your colleagues is allowed. However, you must write the report individually, with your own choice of words and explanations, since otherwise it is not fair for students who do not take part in such discussions. In other words, we DO NOT allow collaboration of writing the report. Moreover, the following patterns may be recognized as plagiarism by us:

- 1. Copy-pasting others' report with minor modification.
- 2. Almost identical figures / codes.
- 3. Copying the solutions from previous years.

Note that you will not get the score for the certain homework that we recognize as plagiarism.

3 Grading of Homework

Each homework will be graded on a basis of 6 points and an interval of 0.25. We allow a certain degree of deviation of your numerical solutions from the sample solutions provided by TA. For all 5 homework assignments, the 4 with highest scores will be used for the final grading.

In general, your graded solutions with comments from the TA, will be handed over one week after the deadline via email. Late submission is allowed within **one week** after the deadline, since the solutions are handed out afterwards. A penalty will be applied to the grading of the late submission. Note that no scores will be received if the homework is handed after the solutions are published online! As discussed previously, plagiarism in homework will result in no score.

4 Gitlab

Please note that additionally to the office hours we also use the issue section of GitLab as a platform to pose questions and make any remarks on the homework assignments or lectures instead of using emails. This enables us to hold public discussions, in which any participant is allowed to answer, but can also be used to post intermediate solution privately in order to avoid plagiarism all in an environment which supports Markdown and uploading of screenshots.

The links, which also include a brief tutorial, to the Q & A's regarding lecture and homework assignments can be found here:

• Lecture: https://gitlab.ethz.ch/IEM-course/lecture-qa-2025

• HW assignment: https://gitlab.ethz.ch/IEM-course/hw-qa-2025

For any other matters unrelated to the lecture and homework assignments you are still free to contact us by email.

5 Q & A

- 1. Will the TA check the codes we provide? In principle the TA will not run your codes if your results / figures look fine. Therefore do remember to generate the figures yourself and integrate into the report. However if you encounter difficulties in coding, you are welcome to discuss with the TA during the office time or via gitlab.
- 2. What should I do if I cannot figure out question XXX? You are most welcome to discuss with the TA during the office hours. If you cannot find time doing so, simply remark which questions you find difficult to answer, upload it to gitlab and add what you think may be helpful to solve the questions.
- 3. What if I think question XXX is wrong? It can happen. If you find typos / errors in the questions please do not hesitate to ask us.
- 4. **How detailed should I write my report?** This is up to you. You may decide if you want to write the derivations with each step listed or only with key steps.