

Grading of the Exercise Sets

The course is split into 3 “blocks” of lectures and an Exercise Set.

The problems in the Exercise Set are meant to be solved during the corresponding block after the topics of the specific problems have been discussed in the lectures. At the end of each block, you should submit your answers for peer review, after which the model solutions and task-specific grading criteria are released. You can participate in a peer-review workshop during the following peer-review period, discussing the model answers and grading criteria. In the peer-review workshop, each student will review the solutions and answers of some randomly selected students and submit their reviews as instructed via Moodle.

The student will be given points mainly based on peer reviews. The course staff reserves the right to override the peer review points. If you are not happy with the issues you received, you can always ask the course staff to review your answers, after which the course staff can, if appropriate, override the peer reviews.

Generic grading criteria

The grading criteria below are meant to help you do the peer reviews and inform you of what a good answer should look like. Notice that the Exercise Set may contain specific instructions which will override the generic criteria listed below. Also, the model answers may include task-specific grading instructions.

Generally speaking, a good answer should explain how the student has obtained the results instead of *only* reporting the final solution to show that the student has understood the question asked, is familiar with the principles needed to solve the problem and has followed appropriate procedures. The level of detail should be such that a fellow student can understand what the student has done based on the written answer alone.

”Small” mistakes (typos, minor computation errors etc.) should not affect the grade, or they should affect the grade only a little if it is evident that the student has understood the main principles and the question. Substantial misunderstanding should, however, affect the grading.

The grading will be based on the written answer only. The grade will be affected if the answer is missing necessary information, is ambiguous or *can be interpreted* as wrong or incomplete by a reasonable person.

If the student uses figures or tables or code snippets, it must be clear from the answer what the student wants the reviewer to conclude from them. About the role of code: the solution should not look like a code listing! Unless asked, the answer does not need to include the code used to produce the results. Small code snippets are ok if other parts of the solution make it clear what the students want the reviewer to conclude from the code snippets. The reviewer is not required to go fishing for results or missing details from the code.

We strongly recommend that students use R Notebook, LaTeX, or other typesetting software to produce the answer. However, suppose the solution contains hand-written parts. In that case, they should be clearly written: the reviewer (or the course staff!) is allowed to give an answer zero points if they cannot easily decrypt the answer because of unclear handwriting or poor scan quality.

The expression should be clear and concise. Recall that being able to express oneself clearly about machine learning is one of the course's learning objectives!

You can use the following grading rubric to aid you with the peer review.

criteria	poor	average	excellent	signs of a strong answer	signs of a weak answer
organisation and clarity	It is not clear what the answer means even after reading through it several times.	Organisation is minimal and has some relation to the question.	Writing is clear, logical, and organised around the question.	<ul style="list-style-type: none"> • The answer is easily understandable for a fellow student. • The answer is structured. • The editing is to the point, clear, logical and exact; appropriate notations and conventions (in mathematical derivations, pseudocode etc.) are observed. 	<ul style="list-style-type: none"> • The ideas are presented un-clearly or inaccurately. • Answer can be interpreted as wrong or incomplete by a reasonable person.
evidence (=facts, substantiated claims, and logical/mathematical argumentation)	The answer contains no evidence.	The use of evidence is minimal, but it answers the question.	There is evidence to support everything that the question asked for.	<ul style="list-style-type: none"> • The factual content is correct and relevant. • There is sufficient amount of essential information; the length of an answer or the number of details are not merits in themselves. • All claims made are substantiated. • Any given source material is used appropriately. • A clear distinction is made between facts, substantiated claims, and opinions. 	<ul style="list-style-type: none"> • The answer contains factual errors. • The answer is based only on opinions (= unsubstantiated claims).
analysis (to the extent applicable to the question)	The evidence presented is not connected to the question.	The evidence is for most parts connected and answers to question asked.	It is clear how the evidence is connected to the question and how it answers it.	<ul style="list-style-type: none"> • The presented evidence and analysis addresses the question. • Causes and consequences are discussed appropriately from different viewpoints (if applicable for the question). • The answer indicates readiness to independently process and apply the related knowledge and skills (if applicable for question). • The student relates the knowledge presented in an answer to the larger context (if applicable for the question). 	<ul style="list-style-type: none"> • The presented evidence is irrelevant for the question. • The presented evidence or analysis indicates that the student has misunderstood the problem.

The final grade should be based on the assessment of the answer as a whole. The final grade is therefore not necessarily “average” of the assessments for the three criteria in the above grading rubric. For example, even one “poor” item typically means that there are some major issues with the answer and that the overall grade will therefore be zero or quite low, while in a good solution, the performance under all three criteria should be good.