

Sparsity course: winter semester 2019/20

Evaluation criteria

The final grade will be determined by two components of the student's performance: the homeworks and the oral exam. In principle they should have a similar weight, but they will contribute to the grade differently.

Homeworks. We plan to have 6 batches of homework, each consisting of 3 problems. In each batch, there should be an easy problem, a medium problem, and a challenging problem. Each batch will have a 3-4 week period between publishing and deadline, so there will be some overlaps between the batches. The solutions may be either (preferred) typed in latex and sent by e-mail to both the lecturers, or (not preferred) given on paper to any of the lecturers. Allowed languages of solutions are English (preferred) and Polish.

Solutions will be graded in the so-called olympic scale:

- Full solution: 6 points
- Full solution with minor issues: 5 points
- At least half of a solution: 2 points
- Anything less: 0 points

Note that anything less than half of a solution is rounded down to 0 points. There might be some variations, like additional items for bonus points. As usual, solutions should be described in a clear mathematical style and serious presentation issues may lead to deducting points. There is a code of honor of not searching the solutions in research papers. Looking at Wikipedia, provided lecture notes, and the *Sparsity* book is allowed.

The homework score will map to a grade modifier from $\{-1.0, -0.5, 0.0, +0.5, +1.0, +1.5, +2.0\}$. This modifier will be added to the grade from the oral exam. The cutoffs for modifiers will be exactly decided during the semester, but roughly it should be like this:

- To get modifier -0.5 one should solve most of the easy exercises.
- Solving all the easy exercises and some of the medium ones should be sufficient to obtain modifier 0.0 .
- To get modifier $+1.5$ one should always solve the easy and the medium exercise, and some of the hard ones as well.

Oral exam. The exam will be based on a random pick of several questions from various topics that were discussed during the semester. The exact form will be determined later, but in principle there will be a question from each major topic and the examination should take around 25 minutes per person. The grade from the oral exam will be from the set $\{-\infty, 3.0, 3.5, 4.0, 4.5, 5.0, 5.5\}$. After adding the modifier from homeworks, the grade will be rounded as follows:

- Everything below 3.0 maps to 2 (not pass).
- Everything above 5.5 maps to 5!.
- 5.5 maps to 5.
- All the other grades are kept unchanged.