

This document tries to explain how we will conduct oral exams for the Maths 102 course on the second semester (2014–2015) at Mahindra École Centrale.

This document is here for two reasons: help you (the students) to understand how this exam will work, and help us (professors and tutors) to all adopt the same grading process and the same strategy.

## General concept for these “Oral Exams”

- We want to experiment and try to have **one** oral exam for every student, once in the semester. We have 230 students, grouped by 115 groups of two.
- We need to start from the third week of the semester (19<sup>th</sup> of January) and to keep a good rhythm until the last week of lectures (27<sup>th</sup> of April – 1<sup>st</sup> of May).
- The oral exam will be a serious exam, with a real mark included in the average mark for the semester. It will probably count for 10% of the semester.
- Every week, 4 out of the 6 (Jai, Vijay, Satya, Abhijit, Parantap, Lilian) Maths professors will each have one hour dedicated for oral exam.
- These one-hour oral exams will happen in one of the tutorial rooms (TR1, TR2, TR3, TR4 or TR5), preferably after every other classes (from 5:35pm to 7:35pm).
- In one hour like this, one professor will evaluate 2 groups (of 2 students). To be efficient, we suggest the following protocol:
  - At the beginning, the first group comes in.
  - Each the two students choose a chapter from the first semester (not the same one), and the professor gives one exercise to each kid.
  - During the first 18 minutes, they sit apart in the Tutorial Room, with nothing else than a pen and paper, working on their problem, by their own, silently.
  - After these 18 minutes, the two students go on the board (split in two), and start to write their solution (silently).
  - The second group comes in, the two kids choose each a different chapter, one exercise is given, they sit in the back of the room (not looking to the board), and also spend 18 minutes on their problem.
  - The two first students have then 15 minutes to show their solution, by using white and colored chalk and writing on the board. This can lead to a short discussion, on the topics chosen by each students.
  - At the end, the professor asks a conceptual question or a more difficult question about the problem, and this closes the discussion. If any serious difficulty about one of the student is pointed out, the professor can ask him/her to meet him later in his office to discuss more (and this will be reported to the appropriate counselor).
  - As soon as the first two students are done and leave (with only their hand-written notes, not the question paper), the two other students go on the board, and start solving and explaining their solution.
- The professor have to fairly share his limited time on both kids. They can read and use their notes, but the professor will only take into account what is said and written on the board, not what they wrote during the preparation time.

- We will try to select an exercise fitting the level of every students (so every professor will come with the list of the average marks each kids got for MA101 during the first semester),
- The oral exam will be graded over 20, with the following pattern:
  - 4 points “given” for the seriousness of the student (not being late, properly dressed, polite, with her/his own material etc),
  - 5 points for speaking and presenting her/his solution correctly on the board,
  - 9 points on the mathematics part of the exam (every exercise should be divided into sub questions, one easy, one normal and the last one harder),
  - and 2 last points for a conceptual question related to the second semester.
- We will not hesitate to give very good marks: for instance having 17/20 is really possible (e.g. every thing is OK except the last question of the small problem).

TODO ! Conclude !