

We summarize here the basic information about the structure and regulations concerning the final exam for the course *Functional Analysis I*. This note should be regarded as an informal complement to the mandatory information provided in the *ETH course catalogue* and it is made available with the sole scope of helping in the process of preparation for the exam.

### Structure of the exam and general regulations

- The duration of the written exam (in any session) will always be **180 minutes**.
- The time and place of the exam are solely determined by the *Akademische Dienste* department, and the instructor has no way of modifying them in order to accomodate special requests.
- During the exam no written aids nor calculators or any other electronic device are allowed in the exam room. Mobile phones must be **switched off and stowed away** in your bag during the whole duration of the exam.
- The structure of each written exam (in any session) will always be the same and is as follows: **7 problems** which are worth **10 points each**.
- Each problem is graded by two independent graders and is assigned a final evaluation (an integer number between 0 and 10) once the two graders reach a consensus.
- Said  $x_i$  your score on the  $i$ -th problem, with  $i = 1, \dots, 7$  your final grade in the exam will be *bounded from below* by

$$\min \left\{ 6, \frac{\sum_{i=1}^7 x_i}{10} \right\}.$$

(I am writing *bounded from below* rather than *equal to* because the final grade distribution may be subject to a renormalization due to a number of factors that are a priori rather unpredictable. However, in the phase of preparation for this exam, it is advisable to assume that your final grade will be actually equal to the formula provided above.)

- As a result of the previous item, let me explicitly state that:
  - (i) the *complete and correct* solution of 6 problems out of 7 is enough to obtain the maximum grade 6,0.
  - (ii) the *complete and correct* solution of 4 problems out of 7 is enough to obtain the pass/sufficient grade 4,0.

- With respect to the meaning of the words *complete* and *correct* let me clarify what follows: in the final exams all your answers do need to be properly justified. The sole indication of an unjustified answer has essentially no value whatsoever.
- It is fine and allowed to use theorems/statements proved in class without reproving them, but you may be required to provide a precise statement of the result in question.

### **Practical rules during examination**

- Be punctual and wait at the door until we let you in.
- Your name will be preprinted on the cover sheet. The sheets will be distributed alphabetically and we will provide a plan which should help you finding your place.
- Put your student identity card onto the table.
- Please bring your own A4-paper and write with blue or black pens.
- **Do not use pencils, erasable pens, red or green ink, and do not use Tipp-Ex.**
- Start every problem on a new sheet of paper and write your name and the number of your student identity card on every sheet of paper.
- Leave enough ( $\approx 3$  cm) empty space on the margins (top, bottom and sides).
- You can solve the problems in any order you want, but please sort them in the end.
- Please write neatly! If something is not readable, we will ignore it.