

Mathematics Refresher Course

First Two Sessions

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Abstract

This course teaches basic mathematical methodologies for proofs. It is intended for students with a lack of mathematical background, or with a lack of confidence in mathematics. We will try to cover most of the prerequisites of the courses in the master's, i.e. basic algebra/analysis and basic applications.

1 Presentation

- Paul Dubois
- 3rd year PhD @ Centrale / TheraPanacea
- Research topic: AI applied to radiotherapy
- Email: `b00795695@essec.edu` (for any question)

Course structure

- 8*3h arranged as 1h20min lecture - 1/3h break - 1h20min lecture
- ~~No pb class planned, but lectures will have integrated live exercises~~
- ~~Interrupt if needed (do not wait for the end of the lecture)~~
- In this document, you will find the content of the first two sessions, with the small exercises we did "live".
- The remaining six sessions will be problem solving.
In case a session is spent on a topic you already, you can skip it
on the condition that you submit all compulsory exercises corresponding to that session.

- Examination

- The course is pass/fail
 - Spoiler: All of you will pass
 - ~~Home exercises, you will need 80+% to pass~~
 - ~~to complete exercises, it should take 30min to 1h~~
 - ~~2-4 exercises~~
 - ~~Hand in paper or PDF~~
 - ~~In the unlikely event of not passing, you will be able to do some extra work to pass~~
 - To pass, I will ask you, for each session, to either be in class, or submit the compulsory exercises.
 - The submission deadlines for the exercises set is exactly one week after the corresponding class.
- Submitting
 1. Solve exercises
 2. Export your work to a single PDF file (e.g. using a scanning smartphone app)
 3. Rename your file "submission_nb_family_name.pdf" where:
 - "nb" is "2" for exercises set 2, "3" for exercise set 3, etc...
 - "family_name" is your family name in latin alphabet, capital letters

*Example: if I wanted to submit exercise set 1, the name of my file should have been "**submission_1_DUBOIS.pdf**"*
 4. Send me one new email per submission, please do not use the "reply" button, create a new email;
For the subject, you can just put the name of the file (or anything else that makes sense).