

# Discrete Mathematics III (Probabilistic Method) WS 2010/11

## Course Information

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**Material** The course follows quite closely the book of Noga Alon and Joel Spencer (The Probabilistic Method, 3rd edition, 2008, John Wiley & Sons, inc.). A copy is placed on the “Handapparat” in the FU Mathematics library. Even though the book is quite well-written, you might find it helpful to make notes about the lectures, since there will be no separate lecture notes.

**Homework.** There will be about three-four exercises offered every week. In order to receive a pass for the exercises, you need to turn in neatly written, correct solutions to 15 exercises of your choice during the semester (there are 16 weeks altogether).

You do not need to turn in something every week, but regular work is very important, so you should aim at turning in something in every two weeks. Each exercise can be turned in until it is discussed in class. You will have at least two weeks to think about the exercises (except the first set.)

The exercises you turn in will be graded, but **only those which receive at least 8 out of 10 points** will count as 1 towards your required 15 correct solutions.

Most of the exercises are not easy. You are encouraged to work on them in pairs or in small groups. However, whatever you submit should be written up by you alone, copying is NOT acceptable, even if you worked on the solution together.

Each exercise will be discussed at the exercise session. Making notes about the solutions is absolutely necessary.

**Grading/Exam.** Your grade is based solely on the final exam, given after the last week of the semester. You will have to learn everything presented in the lecture including definitions, statements and proofs of theorems. The exam will also contain a couple of problems that were posed as homework exercises.

Hence it is very important that you keep following the material of the lecture and try to solve the homework exercises regularly because otherwise it is impossible to learn everything during the last week.