Institut for Matematik og Datalogi
Syddansk Universitet

April 22, 2002
JFB and KM

Discrete Mathematics with Applications
F02 – Lecture 11

Lecture, April 15

Conditional probabilities were introduced and Bayes' theorem was proven. Then, random variables and expectation values for the latter were treated. (Sections 4.4, 4.5 and additional notes).

Lecture, April 22

We study some properties of calculating with expectation values. The expectations of further distributions are computed. Thereafter, the variance of a random variable will be introduced and analysed (Section 4.5. and "Noter til DM 11").

Lecture, April 29

In the first half we finish with probability theory by computing the variance of some particular distributions.

Then Joan Boyar starts to lecture on basic graph theory. We will cover sections 7.1 and 7.2 in the textbook.

Problems to be discussed on April 30

Problems from Section 4.5: 42, 43, 44, 47, 50, 51

From the exam, June 1998: Let X be a random variable which only takes values 0 or 1. Prove that $Var[X] = E[X] \cdot E[1 - X]$.