Content Stochastic Processes 2WB08, academic year: 2008-2009

Book: *Stochastic Processes* by S.M. Ross (Wiley, New York, 2nd ed., 1996)

Chapter 6: Martingales
Section 6.1: all
Section 6.2: all
Section 6.3: all
Section 6.4: without Theorem 6.4.4, Corollary 6.4.5, Theorem 6.4.8. Note that martingale convergence theorem (Th. 6.4.6) was proved in the L_1 version using up-crossing inequality.

Chapter 7: Random walks
Introduction.
Section 7.1: only Prop. 7.1.2 and 7.1.3 were proved (no application of duality to G/G/1 queuing model).
Section 7.3: all.

Chapter 8: Brownian Motion
Section 8.1: all
Section 8.2: all
Section 8.3: all
Section 8.4: only subsection 8.4.1
Section 8.5: all

Remark: Handouts with exercises on Chap.6 and 8 have been distributed during the lectures. They can be found at *http://www.win.tue.nl/ cgiardin/*.