Math 454 - Spring 2021 - Homework 13

Published: Thursday, May 6, 2021

Update May 7, 2021

Written assignment 1 has been added.

Status - Reading Assignments:

Here is the status of the reading assignments you were asked to complete by this date plus the material taught in class without assigned reading.

SCF2 (Shreve Textbook):

ch.1-5.6.1, skipping the remainder of ch.5, ch.6, but skim interest rate models

MF454 lecture notes:

ch.2 - 12

Other: • Wiersema (optional - no internet PDF) p.130-135: one period binomial model

New reading assignments:

Reading assignment 1 - due Monday, May 10:

- **a.** A new version of MF454 with a short chapter on dividends should come out on Fri 5/7. Nothing that you would not find in SCF2 ch.5.5 but hopefully with more emphasis on the important things.
- **a.** Carefully reread MF ch.7.6 (Brownian Motion as a Markov Process) The Markov property is important to understand SCF2 ch.6.

Reading assignment 2 - due: Tuesday, May 11:

- **a.** TBD I hope to have more things written up by May 10.
- **b.** A significant part of the final exam will be about MF ch.4 and 5 (SCF2 ch.1-2). Review the material

Reading assignment 3 - due: Wednesday, May 12:

- a. TBD
- **b.** Review MF ch.6, in particular the binomial asset model.
- **c.** Review MF ch.7.

Reading assignment 4 - due Friday, May 14:

- a. TBD
- **b.** Review MF ch.8, and 10, and 11.2.
- c. Review MF ch.9 and 12.

Written assignments:

Written assignment 1:

Prove Exercise 13.1. in MF454. You will need a version 2021-05-07 or newer of the lecture notes.