

**SF2942 - PORTFOLIO THEORY AND RISK MANAGEMENT
COURSE PLAN, FALL 2016**

PIERRE NYQUIST

1. COURSE MATERIAL

- I Interest rates and cash flows. [Ch 1]
- II Derivatives and no-arbitrage. [Ch 1]
- III Convex optimization. [Ch 2]
- IV Quadratic hedging principles. [Ch 3]
- V Hedging of insurance liabilities. [Ch 3]
- VI Immunization of cash flows. [Ch 3]
- VII Quadratic investment principles. [Ch 4]
- VIII Utility-based investment principles. [Ch 5]
- IX Risk measurement principles. [Ch6]

2. LECTURES

- Week 1
 - Tue 8/30 (I): Theory, Ch. 1.
 - Tue 8/30 (II): Theory, Ch. 1.
 - Thu 9/1: Theory, Ch. 1.
 - Fri 9/2: Theory, Ch. 1.
- Week 2
 - Tue 9/6: Problem session.
 - Thu 9/8 (I): Theory, Ch. 2.
 - Thu 9/8 (II): Theory, Ch. 3.
 - Fri 9/9: Theory, Ch. 3. Assignment 1 available.
- Week 3
 - Tue 9/13: Theory, Ch. 3.
 - Thu 9/15 (I): Problem session.
 - Thu 9/15 (II): Theory, Ch. 3.
 - Fri 9/16: Theory, Ch. 3.
- Week 4
 - Tue 9/20: Theory, Ch. 3.
 - Thu 9/22: Problem session.
 - Fri 9/23: Theory, Ch. 4. Deadline Assignment 1. Assignment 2 available.
- Week 5
 - Tue 9/27: Theory, Ch. 4.

- Thu 9/29: Problem session.
- Fri 9/30: Theory, Ch. 4.
- Week 6
 - Tue 10/4: Theory, Ch. 5.
 - Thu 10/6: Problem session.
 - Fri 10/7: Theory, Ch. 5.
- Week 7
 - Tue 10/11: Theory, Ch. 6.
 - Wed 10/13: Problem session.
 - Fri 10/14: Theory, Ch. 6.
- Week 8: **No classes.** Results on Assignments 1 and 2 available.
 - Office hours: Tues 10-11:30 or by appointment.
- Week 9
 - Office hours: Mon 9:00-11:00.
 - Thu 10/27: **Final exam, 08:00-13:00.**