Course Outline (1st half)
Corporate Finance, Sections 001 and 002

1. Introduction

   (a) Activities of the corporation
       *Readings:* 1*, 2*

   (b) The NPV rule
       *Readings:* 3

2. The Time Value of Money and NPV

   (a) Present Value Concepts

       i. Present value for single payments
           *Readings:* 4.1, 4.2
           *Problems:* PS1 2

       ii. Annuities and growing annuities; perpetuities and growing perpetuities.
           *Readings:* 4.4
           *Problems:* PS1 3, 4; RWJ 4.11, 4.25, 4.42

       iii. Compounding within a year; Effective annual interest rate
           *Readings:* 4.3
           *Problems:* PS1 1, 5; RWJ 4.19

   (b) Applications of Present Value

       i. Valuing bonds

          A. Valuation of discount (zero-coupon) bonds, returns on discount bonds
B. Valuation of annual coupon bonds, returns on coupon bonds

Readings: 5.2 p. 103-105

Problems: PS2 2, 4

C. Semi-annual coupon bonds.

Readings: 5.3

Problems: PS3 1; RWJ 5.5, 5.6, 5.10

D. The yield curve and forward rates

Readings: Appendix 5A p. 130-136, 137-139*

Problems: PS3 2, 3; RWJ A.2, A.4

ii. Valuing common stock

A. Stocks as a growing perpetuity

Readings: 5.4 p. 108-110

Problems: RWJ 5.17

B. Differential growth

Readings: 5.4 p. 111

Problems: RWJ 5.20, 5.23

C. Growth of dividends and the plowback ratio

Readings: 5.5

Problems: PS4 1, 2; RWJ 5.26

D. Net present value of growth opportunities

Readings: 5.6, 5.7, 5.8

Problems: PS5 1; RWJ 5.29, 5.30
3. Principles of Capital Budgeting

(a) NPV and alternatives

i. Definition and pitfalls of the payback period rule and the average accounting return
   \textit{Readings: 6.1} – 6.4

ii. Definition and pitfalls of IRR
   \textit{Readings: 6.5, 6.6}
   \textit{Problems: PS5 2; RWJ 6.10, 6.12, 6.19}

(b) Applying NPV to capital budgeting

i. Incremental cash flows; Depreciation and taxes
   \textit{Readings: 7.1, 7.2}
   \textit{Problems: RWJ 7.3}

ii. Inflation
   \textit{Readings: 7.3}
   \textit{Problems: RWJ 7.13, 7.17}

iii. Evaluating investments of unequal lives
   \textit{Readings: 7.4}
   \textit{Problems: RWJ 7.26, 7.33}

Notes:
- (*) Denotes optional readings
- All readings are from Ross, Westerfield, Jaffe
- Required problems are denoted by the problem set number and number within the problem set (e.g. PS1 2 means the second problem in problem set 1)
- Suggested problems are denoted by RWJ, and then the problem number (e.g. RWJ 4.11 refers to problem 11 in Chapter 4 of RWJ). These are from the revised RWJ problems on the website. They are the same as the suggested problems on the problem sets.