

# Finance I: Investment Management

## Instructor: Jungsuk Han

### ***Course Description***

This course provides an introduction to investment management. This course aims at providing a basic understanding of financial economics with emphasis on investment theory and practice. The goal of this class is to provide you with a structure for thinking about investment theory and show you how to address investment problems in a systematic manner. The topics include financial decision making, optimal portfolio choice, capital asset pricing model, market efficiency, fixed income, financial derivatives and risk management.

### ***Grading***

Final Exam (100%)

Note: You need to pass the exam on the law part to pass the entire course, but the score of the law exam won't affect the letter grade of the course (i.e., the result will be only Pass or Fail).

### ***Assignments and Seminars***

There will be problem sets. Although it is not required to finish them, it is strongly recommended to attend the seminars and finish the assignments for their own learning although they won't be reflected in grading. The seminar sessions are intended for helping understand the assignments better.

### ***Texts***

A set of self-contained lecture notes and problem sets will be provided on the courseweb. The final exam will be solely based on the provided lecture notes and problem sets.

There is a recommended textbook, but it is not required. The textbook is used only for reference in case you want to have further materials to improve your understanding (It is also okay to use an older edition if you like.)

The recommended textbook is as follows:

Essentials of Investments - Global Edition, 9th Edition (note that different editions--- older edition or U.S. edition--- are also fine)

Zvi Bodie, Alex Kane and Alan Marcus

ISBN-10: 007714824-X

ISBN-13: 978-007714824-9

Note: As is mentioned earlier, the final exam will be only based on the lectures including lecture notes and problem sets, and it won't be based on the recommended textbook. Therefore, any materials in the recommended textbook that are not covered in the lecture notes will not be included in the exam.

### ***Prerequisites***

Prerequisites include basic knowledge in accounting, microeconomics, and statistics. A gentle review on background knowledge may be given during the lecture if necessary.

### ***Course Outline***

#### **1. Basics of Investments**

Risk and return, arbitrage, time value of money, investment decision rules, financial markets

#### **2. The Capital Asset Pricing Model (CAPM)**

Optimal portfolio choice, diversification, the Capital Asset Pricing Model (CAPM), multifactor model, market efficiency, market anomalies

#### **3. Fixed Income**

Yields, term structure, default risk, duration, bond portfolios

#### **4. Financial Derivatives and Risk Management**

Options, put-call parity, binomial option pricing models, Black-Scholes option pricing formula