

# HE 307/HE 3007: Financial Economics

Nanyang Technological University

2013-2014, Semester 2

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**Office Hours:** By appointment @ HSS-04-40

## I. General Information

The course introduces the fundamentals of modern finance theories and tools. I will cover topics including 1) introduction to financial markets, 2) portfolio theory, 3) capital market pricing model, 4) capital market efficiency, and 5) valuation of stocks and bonds.

This course not only provides you with a theoretical framework but also encourages you to gain practical experience in investing. You will learn how the theoretical framework can be applied to analyze the news, charts, and key stats on Google Finance. In addition, you will be required to evaluate a local business using the Discounted Cash Flows model. After taking this course, I hope you will have a basic understanding of modern finance theories and the ability to apply these tools to make more informed financial decisions.

## II. Reading

The text is by Zvi Bodie, Alex Kane, Alan J. Marcus, and Ravi Jain, *Investments*, Asia Global Edition, 2013. You are not responsible for the chapters/sections not assigned, but you are responsible for material covered in assigned chapters/sections that are not discussed in lecture, except where explicitly stated otherwise.

## III. Method of Instruction

Lectures: 2 hours per week (1530am-1730pm on Tuesdays @ LT8)

Tutorials: 1 hour per week (930-1030am (@ HSS TR+2), 1030-1130am (@HSS TR+2), 1230-130pm (HSS TR+5), and 130-230pm (HSS TR+5) on Mondays, commence from Week 3)

## IV. Grading

Participation (5%)

Group Project(s) (15%)

Midterm Exam (15%)

Final Exam (65%)

## V. Group Project

You will work with your teammates on a group project which aims to evaluate a business of your choice. I suggest you select a business within walking distance so that you can interview with the owner and conduct simple market survey more conveniently. Alternatively, you can evaluate a public company or a hypothetical company. In any case, you will apply the Discounted Cash Flows model to evaluate this business. I will upload group project samples on Edventure for your reference.

You will work closely with your teammates to complete this project. Each team must consist of 4-8 members. Please be advised that it is not an excuse if your teammates drop out. You will have the chance to present your group project in a tutorial session. A well-written report which summarizes your results will be due on 25 April, 2014.

The report should consist of 4 parts: background, assumptions (please justify your assumptions), calculation (projected financial statements) and conclusion (your valuation of the business). Although there is no minimum/maximum acceptable length, the report, including the main body and appendix, is usually 8-12 pages long.

## **VI. Tentative Schedule**

The timing in the syllabus is only indicative. It is more important that most of the students learn the material well, than rigidly stick to the exact schedule.

**Week 1:** Introduction: What is an Investment? (Ch 1.1, 1.2, 1.4)

**Week 2:** Financial System and Financial Instruments (Ch 2.1-2.5)

**Week 3:** How Securities are Traded (Ch 3.1, 3.2, 3.5-3.7) and Mutual Funds (Ch 4.3, 4.4)

**Week 4:** Risk, Return, and the Historical Record (Ch5.1-5.4)

**Week 5:** Risk Aversion and Capital Allocation (Ch 6.1-6.6)

**Week 6:** Optimal Risky Asset (Ch 7.1-7.4)

**Week 7:** Midterm Exam

**Week 8:** Recess

**Week 9:** Equity Valuation - Fundamental Analysis (Ch 18.1-18.5 and Financial Accounting)

**Week 10:** Equity Valuation - Technical Analysis (Ch 12.2)

**Week 11:** Efficient Market Hypothesis (Ch 11.1, 11.2) and Behavioral Finance (Ch 12.1)

**Week 12:** Capital Asset Pricing Model (Ch 9.1) and Bond valuation (Ch 14.1-14.4)

**Week 13:** Options and Futures (Ch 20.1-20.3, 22.1)

**Week 14:** Review

**Final Exam** (cumulative)