

NANYANG TECHNOLOGICAL UNIVERSITY
NANYANG BUSINESS SCHOOL
BF2201 Investments

A) Course Aims/Description

This is an introductory but demanding course in investments. This course endeavours to provide the basic understanding and tools to conduct portfolio analysis, make investment decisions, and manage portfolios. By the end of this course, students should have a broad understanding of investments and portfolio management. This course covers the analysis of various investment vehicles (equity, bonds and options), allocation of assets, and modern portfolio theory. Students will learn valuation, portfolio construction and evaluation techniques, and apply investment techniques using Excel.

Students are expected to review Financial Management. To maximize acquisition of new knowledge, the instructors will not cover overlapping topics with Financial Management but these topics remain examinable.

B) Intended Learning Outcomes (ILO)/Objectives

By the end of this course, students should be able to:

1. Explain various financial assets and instruments, and the mechanics, risk, and calculations involved in trading financial assets.
2. Explain the relationship between risk and return, and capital allocation.
3. Explain the optimal risky portfolio and efficient diversification.
4. Apply Capital Asset Pricing Model (CAPM), Arbitrage Pricing Theory (APT), and Multi-factor models.
5. Distinguish different forms in Efficient Market Hypothesis (EMH) and their implications on investment decisions.
6. Evaluate the performance of mutual funds and other portfolios.
7. Interpret the yield curve and the effect of duration and convexity on bond pricing.
8. Explain options trading strategies and pricing.

C) Course Content

During the seminar, we will discuss key conceptual issues related to modern investment theory, and learn how to apply the conceptual tools to real-life investment decisions.

Key topics:

Asset Classes and Financial Instruments;
 Securities Markets and Trading;
 Risk and Return: Past and Prologue;
 Efficient Diversification;
 Index Model; Capital Asset Pricing;
 Arbitrage Pricing Theory; Multi-factor Models;
 The Efficient Market Hypothesis;
 Mutual Funds and Other Investment Companies; Portfolio Performance Evaluation;
 Bond Markets; Managing Bond Portfolios;
 Options Markets and Valuation

D) Assessment (includes both continuous and summative assessment)

Component	Weightage	# Team/ Individual
Coursework		
C1: Homework (x4) (online MCQs)	20%	Individual
C2: Excel Assignment	15%	Group
C3: Participations	15%	Individual/Group
* Final exam for BF2201	50%	Individual
Total	100%	

E) Planned Weekly Schedule

Week (beginning)	Topic
1	Asset Classes and Financial Instruments. <i>2.1: Include Treasury bills</i> <i>2.2: Include Treasury notes and bonds, inflation-protected Treasury bonds</i> <i>2.4: Include only market value- weighted index.</i> Securities Markets <i>Include 3.2</i>
2	Securities Markets <i>Include 3.7, 3.8, 3.9</i> Risk and Return: Past and Prologue** <i>5.1: Exclude Dollar Weighted Return</i>
3	Risk and Return: Past and Prologue** <i>Include everything else except 5.6</i> Efficient Diversification** <i>Include 6.1, 6.2 Definition of two asset portfolio expected return and variance</i>
4	Efficient Diversification** <i>Include 6.2, 6.3, 6.4</i> Index Model** <i>Include 6.5</i>
5	Capital Asset Pricing** <i>Include 7.1**, 7.2</i> Arbitrage Pricing Theory <i>Include 7.5</i>
6	Arbitrage Pricing Theory <i>Include 7.5</i>
7	Multi-factor Models <i>Include 7.4</i> The Efficient Market Hypothesis

	<i>Include 8.1**,8.2**, 8.3</i>
	<i>BREAK (2 Mar – 6 Mar)</i>
8	The Efficient Market Hypothesis <i>(Continued)</i> <i>Include 8.1**,8.2**, 8.3</i>
9	Mutual Funds and Other Investment Companies <i>Include 4.1, 4.4, 4.7, 4.8</i> The Efficient Market Hypothesis <i>Include 8.4</i> Portfolio Performance
	Evaluation <i>18.1: Include everything except alpha capture and alpha transport</i> <i>18.5: Include everything except alpha capture and alpha transport</i>
10	Bond Prices and Yields (revise FM, will not be taught but examinable) Managing Bond Portfolios <i>Include 11.1, 11.3</i>
11	Bond discussion (focuses on Ch.11) Managing Bond Portfolios <i>Include 11.1, 11.3</i>
12	Options Markets and Valuation <i>Include 15.1 except the Option Clearing Corporation</i> <i>Include 15.2, 15.3</i> <i>Include 16.1, 16.3</i>
13	Options Markets and Valuation (finish from prior week) Revision