Shanghai Jiao Tong University

BU430 Portfolio Management

Instructor Information:	Lin Mi Home Institution: The University of Queensland Email: l.mi@business.uq.edu.au Office Hours: Determined by Instructor		
Term:	December 16, 2019-January 7, 2020	**Credits:**	4 units
Classroom:	TBD	**Teaching Assistant(s):**	TBD
Class Hours：	Monday through Friday, 160 mins per teaching day		
Discussion Sessions:	2 hours each week, conducted by teaching assistant(s)		
Total Contact Hours:	64 contact hours (1 contact hour = 45 mins, 2880 mins in total)		
Required Texts (with ISBN):	Bodie, Z., Kane, A. and Marcus, A.J. (2018). Investments, 11th Edition, McGraw-Hill Education ISBN: 9780077861674		
Prerequisite:	Students are expected to have a thorough knowledge of all material covered in an introductory finance course.		

Table of Contents

Course Overview

This course provides students with techniques for evaluating investments on an individual basis and in the context of a portfolio. After completing the course, students should achieve the ability to value investments and construct investment portfolios. Portfolio Management is understandably somewhat integrated with other finance courses given the coverage of topics such as financial statement analysis, equity and debt valuation methods, portfolio management and performance evaluation techniques.

Furthermore, this course not only covers the important elements of financial theory with practical examples, but also seeks to combine the course theory and practical examples within an Excel environment (which is a software used extensively in industry workplaces).

Learning Outcomes

After successfully completing this course you should be able to:
1. Analyse and evaluate financial and non-financial information relevant to the task of asset allocation and security selection
2. Assess the value of a financial asset using a variety of accepted methods
3. Explain and evaluate the risks associated with ownership of a financial asset
4. Analyse and implement alternative approaches to portfolio construction
5. Apply theory to the analysis of real world companies and cases, and employ databases and software commonly used in industry
6. Evaluate the performance of a portfolio and portfolio manager

Grading Policy

Mid-semester Exam	30%
Case Study (Company Analysis)	20%
Final Exam	50%

Grading Scale is as follows

Number grade	Letter grade	GPA
90-100	A	4
85-89	A-	3.7
80-84	B+	3.3
75-79	B	3
70-74	B-	2.7
67-69	C+	2.3
65-66	C	2
62-64	C-	1.7
60-61	D	1
≤59	F (Failure)	0

Class Schedule

Date	Lecture	Chapter
Day 1	Equity Fundamental Analysis (1)	Chapter 19
Day 2	Equity Fundamental Analysis (2) with possible Excel Exercises	Chapter 19
Day 3	Equity Valuation with possible Excel Exercises	Chapter 18
Day 4	Macroeconomic and Industrial Analysis	Chapter 17
Day 5	Mid-semester Exam Review	Chapters 19, 18 & 17
Day 6	Mid-semester Exam	N/A
Day 7	Bond Basics	Chapter 14
Day 8	Bond Valuation and Duration (1) with possible Excel Exercises	Chapter 15
Day 9	Bond Valuation and Duration (2) with possible Excel Exercises	Chapter 16
Day 10	Portfolio Management Theory (1) with possible Excel Exercises	Chapters 5, 6, 7
Day 11	Portfolio Management Theory (2) with possible Excel Exercises	Chapters 5, 6, 7
Day 12	Portfolio Management and Theory (3)	Chapters 5, 6, 7
Day 13	Portfolio Performance Evaluation	Chapter 24
Day 14	Revision Lecture: Review of course material and exam information.	Chapters 14, 15, 16, 5, 6, 7 & 24
Day 15	Final Exam	N/A

Teaching Content

Day 1   Equity Fundamental Analysis

This topic shows students how to analyze financial statements. Key financial ratios including profitability ratios, efficiency ratios, liquidity ratios, risk analysis ratios, market price ratios and other common ratios will be discussed in details. The topic also includes an Excel exercise that contains income statement, balance sheet and cash flow statement examples.

Day 2   Equity Valuation (1)

This topic introduces four types of common equity valuation models. Discounted dividend model will be discussed in this topic.

Day 3   Equity Valuation (2)

This lecture continues the topic of equity valuation models by introducing the other three common types of models, including free cash flow model, residual income model, and multiple-based valuation models.

Day 4   Equity Valuation (3)

This lecture will show students how to conduct internally consistent valuations using discounted dividend model and free cash flow model in Excel.

Day 5   Macroeconomic and Industrial Analysis

A firm's intrinsic value comes from its earnings prospects, which are determined by the global economic environment, economic factors affecting the firm's industry and the position of the firm within its industry. Therefore, this topic focuses on business cycle analysis, useful economic indicators, and Porter's Five Forces.

Day 6   Mid-semester Exam

The mid-semester exam covers the first five topics. It includes a number of multiple choice and short-answer/calculation questions. See the Assessment Details Section for further information.

Day 7   Bond Valuation (1)

In the first five topics, equity investments is the focus. In this topic, debt investments will be discussed. This lecture discusses the basic features of bonds, types of bonds, price-yield relationship, valuation of bonds, estimation of the yield to maturity, and risks in bond investments (specifically, credit risk).

Day 8   Bond Valuation (2)

This topic discusses term structure of interest rates and bond portfolio management. Models of interest rates that will be discussed include expectations hypothesis, liquidity preference and dynamic models. Duration and convexity are covered under bond portfolio management/interest rate risk management.

Day 9 Portfolio Theory (1)

This topic discusses the measures of expected returns and risks on a portfolio, the relationship between risk and return, investors' attitudes toward risk, and capital allocations.

Day 10 Portfolio Theory (2)

This topic discusses various asset pricing models including the well-known Capital Asset Pricing Model and Multi-Factor Models. An Excel exercise will be used to show how to construct the Capital Market Line.

Day 11 Portfolio Performance Evaluation

This topic discusses portfolio performance evaluation, including return and risk-adjusted return calculations, style analysis, and performance attribution.

Day 12 Market Efficiency

This topic discusses the notion of market efficiency. Specifically, it includes the efficient market hypothesis, random walk, weak form/semi-strong form/strong form efficiency, event studies, efficient market hypothesis tests, Fama and French models, and analyst and fund manager performance.

Day 13 Behavioral Finance

This topic discusses empirical evidence of investor behavior, including information processing errors and behavioral biases (such as framing, mental accounting and disposition effect).

Day 14 Revision Lecture

This lecture reviews the topics covered throughout the course with a focus on the topics covered after the mid-semester exam.

Day 15 Final Exam

The final exam covers topics taught from Days 7-14. It includes a number of multiple choice and short-answer/calculation questions. See the Assessment Details Section for further information.

Assessment Details

Assessment Task 1: Mid-semester Exam

Task Description	The mid-semester exam covers the first five topics. It includes two sections. Section A has 15 multiple choice questions, each worth 1 mark. Section B contains 3 short-answer/calculation questions, for a total of 15 marks. Overall, the exam has 30 marks weighting 30% towards the final grade.	
Criterion Number	Criterion Description	Measures
1	Calculate different types of financial ratios	LO1
2	Conduct DuPont Analysis	LO1
3	Analyze financial statements	LO2
4	Value equity using various models	LO2
5	Understand key economic indicators	LO1
6	Understand Porter's Five Forces	LO1
Task Length	Reading time: 10 minutes; Working time: 90 minutes; During reading time, write only on the rough paper	

Assessment Task 2: Case Study (Company Analysis)

Task Description	Individually, students are required to prepare their analysis for a company (company name TBA) under four headings: 1) macroeconomic analysis, 2) industry analysis, 3) company analysis, and 4) based on the previous three sections, construct a valuation model and make a recommendation whether to buy/sell/hold the company.	
Criterion Number	Criterion Description	Measures
1	Conduct macroeconomic analysis	LO1, LO5
2	Conduct industry analysis	LO1, LO5
3	Conduct company analysis	LO1, LO5
4	Conduct equity valuation and make a recommendation	LO1, LO5
Task Length	Page limit: 10 pages excluding table of content, references and appendix. The task is due on Day 11.	

Assessment Task 3: Final Exam

Task Description	The final exam covers mainly the topics after the mid-semester exam, i.e. from Days 7-14. It includes two sections. Section A has 10 multiple choice questions, each worth 1 mark. Section B contains 5 short-answer/calculation questions, for a total of 40 marks. Overall, the exam has 50 marks weighting 50% towards the final grade.	
Criterion Number	Criterion Description	Measures
1	Understand bond characteristics	LO3

2	Measure portfolio expected returns and risks	LO4
3	Understand various asset pricing models such as the CAPM	LO3
4	Evaluate portfolio performance	LO6
5	Understand the efficient market hypothesis and its associated tests	LO1
6	Understand various types of behavioral biases	LO4
Task Length	Reading time: 10 minutes; Working time: 120 minutes; During reading time, writie only on the rough paper	