



北京理工大学学术学分课程

Beijing Institute of Technology Academic
Credit Courses Program

FIN9532-APPLIED PORTFOLIO MANAGEMENT AND MODELING

Syllabus

Jan.3, 2019 – Jan.26, 2019

Term Duration: Jan. 3, 2019 –Jan. 26, 2019

Credit Points: 4

Level: Postgraduate

Instructor Name: TBA

Home Institution: Beijing Institute of Technology

Lecture Hour: 9:00-11:50

Office Hour: TBA

Course Description

The course provides basic, traditional approaches to financial modeling and analysis, as well as the applying spreadsheet software to financial analysis. The focus of this course is on passive and active funds management, and the use of derivative securities in funds management. The course covers a wide range of basic and advanced models in the areas of corporate finance, portfolio management, options, and bonds. I

Required Textbook

Financial Modeling: 3rd. Edition,

Author: Simon Benninga

Publisher: The MIT Press

ISBN: 978-0-262-02628-4

Course Hours

The course has 14 class sessions and 1 field trip in total. Each lecture session is 180 minutes in length. The classes are from Monday to Friday.

Prerequisite Course

None

Course Schedule

Week	Day	Date	Chapter	Topic	Assignment/ Notes
Week 1	Thu.	Jan.3, 2019	Introduction	What Is Portfolio Theory and Application	Information of Portfolio and Application.
Week 2	Mon.	Jan.7, 2019	Chapter 1,2	General Analysis of Calculating Efficient Portfolios	Finding Efficient Portfolios: The Capital Market Line(CML)
	Tue.	Jan.8, 2019	Chapter 7,8	Introduction to Data Tables and Topics in Financial Mathematics	Calculating Portfolio Means and Variances
	Wed.	Jan.9, 2019	Chapter 10	Data Tables and Topics in Financial Mathematics	Two-Dimensional Data Table
	Thu.	Jan.10, 2019	Chapter 11	Study of the Real Market Portfolio	Test the CAMP
Week 3	Mon.	Jan.14, 2019	Chapter 15	Option Strategies: Payoff from Portfolio of Options and Stocks;	Group Discuss: Option Arbitrage Propositions
	Tue.	Jan.15, 2019	Chapter 16	What is The Binomial Option Pricing Model	Binomial Model
	Wed.	Jan.16, 2019	Chapter 17	Basic Introduction to The Black-Litterman	The Black-Litterman Approach to Portfolio Optimization
	Thu.	Jan.17, 2019	Chapter 25,27	Analysis of Multiple Stock Portfolio	Portfolio of Two Shocks
	Fri.	Jan.18, 2019	Field Trip	Site Visit at Fortune 500 Corporation	Case study
Week 4	Mon.	Jan.21, 2019	Chapter 29	Definition of Simulating Options and Option Strategies	Case Study- Simulating Portfolio Insurance
	Tue.	Jan.22, 2019	Chapter 30	Using Monte Carlo Methods for Option Pricing	Pricing a Call Using the Binomial Monte Carlo Model

	Wed.	Jan.23, 2019	Chapter 31	Analysis of The Black-Scholes Model	Using the Black-Scholes Formula to Price Structured Securities
	Thu.	Jan.24, 2019	Presentation	Engineering institutions and their Standard Contracts	
	Sat.	Jan.26, 2019	Final Exam		

Grading Policy

Items	Percentage
Attendance	10%
Case study	40%
Final Exam	50%
Total	100%

Academic Honesty

Academic honesty is not only a fundamental part of learning and teaching, but also a core value that this course embraces. Behaviors of academic dishonesty, as outlined hereinafter, are unacceptable and will be penalized:

- a) Plagiarism where students present work for assessment, publication or otherwise that is not their own, without appropriate attribution or reference to the original source. Plagiarism can include:
 - i) paraphrasing or copying published and unpublished work without a reference;
 - ii) adopting the ideas or concepts of others, including the structure of an existing analysis without due acknowledgement by way of reference to the original work or source.
- b) Collusion, where students present work as independent work when it has in fact been produced in whole or in part with others unless prior permission for joint or collaborative work has been given by the Course Coordinator. Collusion can include:
 - i) a student inappropriately assisting with or accepting assistance with the production of an assessment task;
 - ii) submitting work which is the same or substantially similar as another student's work for the same assessment task.
- c) Cheating, where a student acts in such a way as to seek to gain unfair advantage or assist another student to do so. Cheating can include:

- i) submitting falsified, copied or improperly obtained data relating to results of practicum, field trips or other work as if they were genuine; submitting an assessment task with the intention of deceiving or misleading the instructor about the student's contribution to the work;
 - ii) submitting an assessment task written or answered for the student by another person or which the student has copied from another person;
 - iii) submitting the same or a substantially similar piece of work for assessment in two different courses (except in accordance with approved study and assessment schemes);
 - iv) a student falsely indicating that they have been present at an activity where attendance is required;
 - v) completing an assessment task outside the conditions specified for that task.
- d) Cheating in Examinations means engaging in dishonest practice or breaching the rules regarding examinations, which can include:
 - i) communicating in any way during an examination with any person who is not an examination supervisor inside or outside the examination venue;
 - ii) giving or accepting assistance from any person who is not an examination supervisor whilst in the examination venue;
 - iii) reading, copying from or otherwise using another student's work in an examination or knowingly allowing a student to do so;
 - iv) possessing, referring to or having access to any material or device containing information directly or indirectly related to the subject matter under examination, other than that explicitly approved by the Course Coordinator;
 - v) acquiring, or attempting to acquire, possess or distribute examination materials or information without approval;
 - vi) permitting another person to attend an examination on a student's behalf or attending an examination on behalf of another student;
- e) Other dishonest acts including but not limited to:
 - i) altering or falsifying any document or record for the purposes of gaining academic advantage;
 - ii) offering or giving money or any item or service to a University staff member or any other person to gain academic advantage for the student or another person;
 - iii) inventing references.