Introduction to financial management
This is an introductory course in the basic theory and application of investment theory and corporate finance. It will provide students with a theoretical and practical framework in which financial decisions are analyzed. I will try to explain the financial principal at work on a common sense, intuitive level before launching into purely theoretical issue. The central focus of this course will emphasize the role of CFO as a decision maker, and how he/she might proceed in a given situation. Students registered in this course should expect to participate in the full discussion of practical and theoretical current financial issues.

Investment theory and practice
This course will provide graduate students with a theoretical and empirical framework in which investment and consumption decisions are analyzed. It is intended to help graduate students not only understand portions of contemporary investment theory but also develop their own empirical application in this area.

The focus of this course will be devoted to detailed analysis of investment instruments currently available in Taiwan and the U.S.A. Students registered this course should expect to get involved in full discussion of investment instruments’ empirical applications.

Financial Institutions and markets
Aimed at improving students’ reading, writing and speaking skill for financial markets and institution. The contents consist of the role and importance of the financial markets and institutions, the functions of money, bond, mortgage, stock, futures and options markets, valuation of financial assets, activities of financial institutions such as commercial banks, investment banks and mutual funds, and behavioral financial markets. Familiarity with these topics is necessary for students to be competent in their future professional career.

Research method and methodology in finance
This course introduces students to databases, software, research method and empirical methodology used more frequently in performing financial research. All key elements of research method will be covered, especially including research designs and research writings. The key role of event study, regression and ANCOVA methodology will be discussed and employed. We will study the basic stock-price and financial-accounting databases employed by academic researchers, such as CRSP, COMPUSTAT, TAQ, TEJ and TORQ. Students will gain experience with the most common software tools such as SAS. Students will learn how to write a journal paper
and a referee report. I will introduce my field of expertise, discuss current research in my areas, most important literature, major issues and research questions, tools and databases. Students will be asked to present several methodology papers and research papers in the class. By the end of this course, students should be able to:

1. Become familiar with the financial databases, SAS statistical software, general research methods and research designs.
2. Learn the fundamentals of several statistical methods commonly used in finance research.
3. Learn how to critically read journal articles and how to write them.

**Econometrics**

The purpose of this course is an introduction to econometrics for first year accounting and finance graduate students. The background needed for this course is calculus and statistics. The course is application-oriented, and it is very helpful for students to do empirical researches. Many techniques and concepts covered in this course will be very helpful for your theses.

**Financial engineering**

The purpose of this course is to provide an introductory level of mathematics for financial derivatives to graduate students with business background. Topics will be covered include arbitrage theorem, introduction to stochastic calculus, Brownian motion, martingale representation theorem, Ito integral, Ito’s lemma, stochastic differential equation, Girsanov theorem, Black-Scholes model, interest rate partial differential equation, Feynman-Kac formula, and others.

**Fixed-income securities**

The market of fixed income securities in Taiwan is in a booming stage. For example, the IOs and POs have not been a valid financial vehicle in Taiwan until recently. The foundation of pricing and risk management for FIS is the complete spot rate curve built based on the treasury securities issued by the government. Though the trading value exceeds 500 billion NT dollars per day now, without active trading of off-the-run bonds in the secondary market, it is difficult to find the fair values for FIS and associated derivatives. The purpose of this course is to introduce the concept of pricing and risk management for fixed income securities, the background of financial engineering is not required but preferred.
**Time series analysis**

The purpose of this course is to introduce the basics of time series analysis for the applications in economics and finance. This course will be very helpful for those who will write theses regarding empirical research in financial markets such as equity markets and international finance. Students taking this course require the background of basic probability theories especially in regression, economics and finance. The basic skills in computer programming will be needed for the homework.

**Corporate finance (I)**

Since this is the first class in corporate finance, this class intends to provide you an overview of corporate finance. We will cover a variety of topics in corporate finance, starting from agency theory, investment decision, capital structure, payout policy, to some topics in corporate control. Meanwhile, we will focus on topics with higher recent research attention.

**Corporate governance**

This course intends to familiarize students the concepts of corporate governance and how a company’s governance mechanisms affect its operation and its performance. This course would discuss such topics as corporation, shareholders/ownership, the board of directors, management performance, and international governance. In addition to the lectures on the text, real world cases as well as academic empirical papers will be discussed in the classroom. Students are expected to understand the topics via intensive class discussion and research projects.

Before taking this class, students must possess the knowledge of investment and financial management. In addition, the fundamental skills in Excel and financial calculator are also expected.

**Investment**

This class intends to familiarize students such concepts of investment as basic investment setting, security markets, asset allocation, portfolio theory, security valuation, and portfolio management.

In addition to the lectures, an intensive class discussion is definitely required. *To be able to participate in the class discussion, students should routinely read the articles from newspapers, magazines, and others.*

The class will be formed into several groups, within each of which students can discuss the topics and assignments in and out of class meeting, and work on a Portfolio Management Project at the end of the semester.

This class is one of the English-speaking classes in the College of Management, and the
lectures should be given in English. However, this is a new step to many of you, so I would try to assist you in understanding the lectures and in learning the topics of investment.

Derivatives
This course examines the valuation of derivative securities such as options and futures contracts, as well as the use of these instruments in managing business and financial risks. The topics to be covered include the pricing of futures contracts, swaps, and options, the use of derivative instruments in hedging, exotic options, and the valuation of derivative instruments written on weather, energy prices, and insurance claims. The rewards to students who acquire a first rate knowledge of the material in this course can be very high. Individuals who are skilled at analyzing derivatives are in great demand in financial institutions throughout the world. If successful they can command very high salaries within a few years of graduating.

Numerical methods in finance
This course introduces how to construct the approximation solution of mathematic problems and solve those by computer programming. In addition, the logical inference and error analysis of numerical methods will be mentioned. Since this course is designed for students who major in Finance, the ways how to apply these methods to financial calculation will be emphasized. Furthermore, the programming language used in this class are Matlab language. It is your responsibility to learn how to write computer programs in high-level programming languages, such as C, C++, VB, or FORTRAN etc. We are not going to cover the skill in the class.

International financial management
1. Give the student an understanding the reasons for engaging in international business.
2. Topics cover foreign exchange and commodity markets, international securities markets, derivative securities, interest rate and currency swaps markets.
3. Each topic is assigned to present to develop the student’s ability of thinking and analyzing logically.

Futures market
1. Explain why the futures market exist, where and how they are traded, how to employ them in managing risk.
2. Addresses the theory of diversification and the importance insurance opportunity offered by the future markets.
3. Give the student an understanding the role of future markets in managing risk, which mostly concerns financial futures.
4. Each topic is assigned to present to develop the student’s ability of thinking and analyzing logically.