

清华大学

2008-2009 学年度

秋季学期全英文授课课程内容简介

**Introduction to the Undergraduate Courses**

**Taught in English in the Fall Semester of 2008-2009**

# Catalogue

## **School of Mechanical Engineering**

Fundamentals of Engineering Materials  
Introduction to Micro & Nano Manufacturing  
Metrology for Micro-and Nanotechnology  
Database System Concepts  
International Logistics

## **School of Information Science and Technology**

Selected topics in information networks  
Digital Signal Processing  
Discrete-Time Signal Processing

## **School of Sciences**

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Molecular Basis of Human Diseases

## **School of Economics and Management**

Real Analysis  
Programming Language  
Public Finance  
Investments  
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Auditing I  
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Intermediate Microeconomics  
Economic Growth  
Financial Statement Analysis  
Principles of Finance  
Topics on International Accounting  
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Principles of Insurance: Life, Health and Annuities  
Investment Banking  
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## **School of Humanities and Social Sciences**

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Advanced Modal Logic

**School of Law**

Intellectual Property in Cyberspace

**School of Journalism and Communication**

Intensive English for Journalism and Communications Studies III --U.S. Media Culture

Intensive English for Journalism and Communications Studies V--Introduction to Public Relations and Advertising

## The Undergraduate Courses Taught in English in the School of Mechanical Engineering

**【Course Number】** 20120053

**【Course Title】** 工程材料基础 Fundamentals of Engineering Materials

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** WU Yunxin

**【Brief Introduction】**

The Fundamentals of Engineering Materials is taught in English and composed of three parts: (1) atomic-level structures, (2) microscopic-level structures, and (3) structure-property relationship of materials. The first part covers interatomic bondings, crystalline and noncrystalline structures, crystal defects, and atom diffusion. In the second part, the phase diagrams of binary alloys (including Fe-C alloys) and ceramics are described, and the phase transformations of materials as well as the principles of heat treatment for steels are introduced. The third part focuses on the stress-strain behaviors of materials and the mechanisms of plastic deformation and strengthening. The course aims to make students understand well about the relationship among the four components of materials science and engineering, e.g., composition, processing, structure, and property. This helps to establish a solid theoretical basis for their subsequent study in Engineering Materials.

**【Assessment】** Homework and Lab (30%) +project (10%)+ final exam (60%)

**【Course Number】** 40131042

**【Course Title】** 微纳米制造导论 Introduction to Micro & Nano Manufacturing

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** E. Obermeier

**【Brief Introduction】**

The curriculum content gives weight to the fundamental technologies of silicon process used in Micro Electro Mechanical Systems (MEMS). Also the fundamental technologies of non-silicon process are involved in. The silicon process includes photolithography technology, oxidation, doping and ion implantation, PVD and CVD, dry etching and wet etching, pattern transfer with etching and additive techniques. The non-silicon process includes LIGA process and micro molding, and non-traditional micro machining technologies without masks such as micro electro discharge machining, micro electrochemical machining, micro laser machining, micro mechanical machining etc. Also bonding and packaging of micro devices, micro manipulation and assembly, are dealt with. Some typical fabrication technologies of MEMS or miniaturized devices are given. And a brief introduction to nano manufacturing technology is added.

**【Assessment】** Class attendance (5%) + assignment (20%) + discussion on special subjects& report (15%) + mid-term exam (20%) + final exam (40%)

**【Course Number】** 40131052

**【Course Title】** 微纳米测量与测试技术 Metrology for Micro-and Nanotechnology

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** T. Pfeifer

**【Brief Introduction】**

The course is intended to provide the students with knowledge on theories and methods of measuring techniques for micro- and nanotechnology, including the features of the metrology for micro- and nanotechnology, signal sensing and microsensors (resistive, capacitive, inductive, thermoelectrical, piezoelectric, piezoresistive, and fiber optic, etc.), optical methods such as the interferometry, microscopy, SEM, autofocusing, structured light encoding, fringe projection, and confocal microscopy, as well as the techniques for measuring typical physical quantities such as the displacement, velocity, acceleration, surface

roughness, flow, temperature, force and pressure.

【Assessment】 Daily performance (30%) + final exam (70%)

【Course Number】 30160123

【Course Title】 数据库原理 Database System Concepts

【Credits】 3 【Semester】 Fall

【Instructor】 GU Xueyong

【Brief Introduction】

Introduction to the theories and tools of Database Management Systems (DBMS). The course is designed for IE students who are mainly users of DBMS, not the software developers of DBMS. The course would cover database schema design, relational algebra, relational calculus, and object-relational database design. Structured Query Language, query by example, and other querying languages will be introduced in this course. It would also include case studies of different applications of DBMS technologies to Industrial Engineering applications. Applications in the areas of logistic management, distributed and mobile information services, and decision support systems will be mentioned in the course. Based on schedule and availability, two or more guest speakers will be giving lectures on specific case studies and design methodologies of DBMS.

【Assessment】 Mid-term exam (30%) + final exam (30%) + individual assignment (40%)

【Course Number】 40160522

【Course Title】 国际物流 International Logistics

【Credits】 2 【Semester】 Fall

【Instructor】 ZHAO Lei

【Brief Introduction】

Discuss and study the issues related to international logistics, understand both the commonalities and differences between international and domestic logistics, and learn to apply these concepts in real world applications.

【Assessment】 Assignment + in-class quiz + group project + exams

## The Undergraduate Courses Taught in English in the School of Information Science and Technology

**【Course Number】** 40230992

**【Course Title】** 网络技术前沿 Selected topics in information networks

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** WANG Jian, ZHANG Lin

**【Brief Introduction】**

This course offers an introduction to the advancement in the computer and communication networks. Oriented to the level of senior undergraduate students, it compiles latest conference and journal papers as the primary teaching materials, and organizes the topics into sixteen 1.5-hour weekly lectures. Topics are divided into two categories, namely, the network philosophies, and the new network technologies. Besides technical details, important mathematical tools are also introduced. Different from the specialized math courses, this course concentrates on the math that are well received and widely used in the network research area, including queuing theory, graph theory, optimization theory and game theory, and illustrates the application of the math by introducing successful pieces of research work. English will be the only working language of the course.

**【Assessment】** Class project + thesis

**【Course Number】** 30230623

**【Course Title】** 数字信号处理 Digital Signal Processing

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** Juhnson Michael

**【Brief Introduction】**

Digital Signal Processing is a fundamental specialty course for undergraduates of the Electronic Information Program. With the development of micro-electronics and computer techniques, computers have been widely used for processing different kinds of signals. It is necessary for students to learn the theories, techniques, and means to solve signal processing problems in digital ways. Students need not only to learn the theories, but also to use these theories to solve practical problems. The purpose of this course is to let students study the fundamental theories, concepts, and analysis techniques, as well as implementations and applications of signal processing techniques. Students are trained by exercises and software experiments to improve the capability of analyzing and solving problems, which will set up a solid base for their further study and future jobs.

**【Assessment】**

**【Course Number】** 40250592

**【Course Title】** 离散时间信号处理 Discrete-Time Signal Processing

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** ZOU Hongxing

**【Brief Introduction】**

Discrete-Time Signal Processing, as the term suggests, is the processing of discrete-time signals. The aims of this course is to gain an understanding of the significance of discrete-time signal processing in the fields of

computing, telecommunications and other areas of computer science and electronic/electrical engineering; to gain an appreciation of the technology and the software tools currently available and, to study in detail some of the most important design techniques for discrete-time signal processing systems.

After successfully completing this course students will be able to:

1. Understand time representation, frequency representation, and joint time-frequency representation of a signal.
2. Understand fundamental concepts such as “linearity”, “time-invariance”, “impulse response”, “convolution”, “frequency response”, “z-transforms” and the “discrete-time Fourier transform”, as applied to discrete-time signal processing systems.
3. Apply a design technique for FIR type digital filters known as the “windowing method”.
4. Apply several design techniques for IIR type digital filters: “pole-zero placement”, the “derivative approximation” and the “bilinear transformation” techniques.
5. Use the “MATLAB” language and “signal processing toolboxes” for analyzing, designing and implementing digital signal processing (DSP) systems such as digital filters.
6. Understand analogue/digital conversion as required for the digital processing of analogue signals.
7. Understand the discrete Fourier transform (DFT), its applications and its implementation by FFT techniques.
8. Understand the discrete Hilbert transform (DHT), its applications to time-frequency distributions.

**【Assessment】** Report on specific subjects (70%) + debate (20%) + daily performance (10%)

## The Undergraduate Courses Taught in English in the School of Sciences

**【Course Number】** 30450263

**【Course Title】** 微生物学 Biology of Microorganisms

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** CHEN Guoqiang

**【Brief Introduction】**

Microbiology is a compulsory course for students in biology department. This course covers multiple disciplines in microorganism, molecular biology, biochemistry, immunology and microbial diseases. Students taking this course will learn systematic knowledge of microorganism, as well as basic experimental skills. The most popular book Biology of Microorganisms for north American college students is used in this course. Biology of Microorganisms will be updated every two years. New knowledge and technique in microbiology will be added in each update. It is very helpful for student to improve their knowledge and scientific understanding of microbiology.

**【Assessment】** Exam

**【Course Number】** 30450213

**【Course Title】** 生物化学(2) Biochemistry II

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** LI Zhen

**【Brief Introduction】**

Biochemistry II is the continuation of Biochemistry I. This course is divided into two parts. The first part (Chapter 14-23) is bioenergetics and metabolism, which includes principles of bioenergetics (Chapter 14), catabolism of carbohydrates, lipid acids and amino acids (Chapter 15-18), oxidative phosphorylation and photophosphorylation (Chapter 19), biosynthesis of carbohydrates, lipids and amino acids (Chapter 20-22) and integration and hormonal regulation of mammalian metabolism (Chapter 23). The students are required to be familiar with the major catabolic and anabolic pathways of carbohydrates, lipids and amino acids, as well as the important enzymes and coenzymes involved in these pathways and the regulation of each pathway. The students are also required to know the interconnection and regulation between different catabolic and biosynthetic pathways.

The second part (Chapter 24-28) of this course is information pathways. It includes genes and chromosomes (Chapter 24), DNA metabolism (Chapter 25), RNA metabolism (Chapter 26), protein metabolism (Chapter 27) and regulation of gene expression (Chapter 28). The students are required to know the structure of genes and chromosomes, the pathways of DNA, RNA and protein metabolism and the regulation of gene expression in prokaryotes and eukaryotes.

**【Assessment】** Assignment (15%) + mid-term exam (15%) + final exam (70%)

**【Course Number】** 40450263

**【Course Title】** 重大疾病的分子机制 Molecular Basis of Human Diseases

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** LI Peng

**【Brief Introduction】**

This course aims to provide students with in-depth knowledge of the basic mechanisms of common human diseases such as cancer, diabetes, obesity, atherosclerosis, Alzheimer's disease etc., and to prepare them for future translational research. The course focuses on the current molecular mechanisms underlying the pathogenesis of each disease. There will be extensive discussion on results from current cutting-edge research. Prospective students should have basic knowledge of biochemistry, molecular and cell biology and immunology before registering for this course. Brief knowledge on human physiology and the pathogenesis of each disease will be introduced but students are expected to read extensive reference paper and textbook to understand the content of the lecture.

**【Assessment】** Mid-term exam (40%) + final exam (40%) + debate on specific subjects (20%)

## The Undergraduate Courses Taught in English in the School of Economics and Management

**【Course Number】** 10510064

**【Course Title】** 实分析 Real Analysis

**【Credits】** 4 **【Semester】** Fall

**【Instructor】** DUAN Yun

**【Brief Introduction】**

The main content of this course is measure and integral theory. Our course contains the following topics: set and point set, Lebesgue measure, measurable function, Lebesgue integral, differentiation and integral, and L space.

**【Assessment】** Daily assignment (50%) + final exam (50%)

**【Course Number】** 20510102

**【Course Title】** 计算机语言 Programming Language

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** WEN Zhong

**【Brief Introduction】**

Now we are in an era called Information era, which roots on a basic fact that, Information Technology (IT) has deeply and widely reshape almost every aspects, e.g., production, operation, business, society and personal life. In order to gain competitive advantage in Information era, people should understand the basis of IT. Programming language, as one of the key component of IT, is worth to learn. C language, as one of the most prevailing and widely advanced computer programming languages, is a powerful tool for students to understand IT. The course contents cover three major parts: Basis of C Language, Structural Programming Language Designing and Advanced Programming.

**【Assessment】** Daily assignment (40%) + final exam (50%) + class participation (10%)

**【Course Number】** 30510073

**【Course Title】** 公共财政学 Public Finance

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** WU Binzhen

**【Brief Introduction】**

Public Finance is the branch of economics that studies the role of the public sector in the economy. In this course, we will study the economic foundations that justify the existence of the public sector, and the economic theory that describes what the role of the public sector should be. We concern how the governments can intervene the economy and how they should do so. We focus on the government taxes and spending activities. We will then look at what the U.S. and Chinese public sector actually does, and how it affects individual and corporate decision-making and welfare.

**【Assessment】** Daily assignment (10%) + thesis (30%) + final exam (open book, 60%)

**【Course Number】 30510182**

**【Course Title】 投资学 Investments**

**【Credits】 2 【Semester】 Fall**

**【Instructor】 WANG Yintian, ZHU Yingzi**

**【Brief Introduction】**

This course aims to provide students with understanding of (i) the fundamental knowledge for those common and important investment strategies in financial market, (ii) the portfolio management techniques used to manage risk or make speculation, and (iii) the recent development of portfolio management tools and investment strategies in financial markets. On the theoretical side, this course introduces fundamental knowledge for investment strategies and portfolio management. On the practical side, this course covers recent topics that are related to the investment strategies and portfolio management. Some projects of portfolio management are specially designed to let you apply the theoretical knowledge to practice.

This course is highly recommended for students who intend to pursue a career or further studies in investment strategies and portfolio management. Of course, the knowledge will also be very useful when you make your own personal investment decision.

**【Assessment】** 2 problems sets (30%) + 2 case presentations (including the final case presentation, 40%) + 1 mid-term exam (20%) + class participation (10%)

**【Course Number】 30510273**

**【Course Title】 数据结构 Data Structure**

**【Credits】 3 【Semester】 Fall**

**【Instructor】 WEI Qiang**

**【Brief Introduction】**

Nowadays, we are in an era called Information era, which roots on a basic fact that, Information Technology (IT) has deeply and widely reshape almost every aspects, e.g., production, operation, business, society and personal life. One important characteristic of information era is storing, representing and processing of large-scaled structural data. How to represent and process the large-scaled data is the key factor not only for information systems construction, but also for enterprise to gain competitive advantages. This course will focus on constructing effective data models using standard data structures as well as efficient processing, which will cultivate the students with the abilities of efficient data modeling and data processing.

The course contents include:

- a) Analysis on Computational Complexity;
- b) List, Stack and Queue, and Pattern Matching;
- c) Array and Compression;
- d) Binary Trees;
- e) Trees and Graphs;
- f) Search;
- g) Sorting;
- h) New Tech.

By the end of the course, the students should:

- 1) Master the major data structures and efficient processing based on C programming;
- 2) Master the preliminary abilities to model and analyze some real-world applications.
- 3) Cultivate the ability for further information analysis, design and implement.

To accomplish this global goal, lecturing is far from enough; case programming and analysis, assignment

and Q&A are also important.

**【Assessment】** Individual assignment (30%) + project report (group work, 10%) + final exam (50%) + class participation (10%)

**【Course Number】 30510332**

**【Course Title】** 系统分析与设计 System Analysis and Design

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** MAO Bo

**【Brief Introduction】**

The course introduces essential concepts in information systems (IS) area: the effect of IS, the methods of IS plan, analysis, and design (including prototyping, lifecycle, etc.), and establish of IS. And it is affected by technology and management. The instructor will help the students to know how to build and manage the right IS in right way for the organization with right technology.

**【Assessment】** Individual assignment (10%) + class report (10%) + group assignment (30%) + final exam (50%)

**【Course Number】 30510393**

**【Course Title】** 审计学（1） Auditing I

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** LI Dan

**【Brief Introduction】**

1.Introduction to Auditing and Public Practice; 2.Basic Concepts and Techniques of Auditing; 3.Audit applications, including Revenue and Collection Cycle, Acquisition and Expenditure cycle, Production and payroll cycle, Finance and Investment cycle etc.

**【Assessment】** Assignment (20%) + mid-term exam (30%) + final exam (50%)

**【Course Number】 30510732**

**【Course Title】** 管理学原理 General Management

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** LU Jiangyong

**【Brief Introduction】**

This course examines basic management concepts and principles, their historical development, and their application to modern organizations. Topics covered include planning, organizing, decision making, leadership, and control. In addition, the course includes an introduction to business ethics and social responsibility, human resource management, organizational design and organizational behavior.

This course also is designed to help students identify, develop, and improve the necessary skills to be a good manager and a good team member. Topics covered include understanding managers' roles and responsibilities, developing self-awareness, building trust, communication, improving relationships, understanding cultural diversity, teambuilding, and work/life commitments. Utilizing campus resources of exceptional access to service learning, special events, and university lectures, students will have an opportunity to broaden their managerial/leader thinking, understanding, and professional potential.

**【Assessment】** 3 group assignments (30%) + final exam (close book, 70%)

**【Course Number】 30510743**

**【Course Title】** 中级微观经济学 Intermediate Microeconomics

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** LI Daokui

**【Brief Introduction】**

The course presents basic theories of microeconomics and its applications. Topics covered include consumer theory, firm theory, market supply and demand, externality and public goods, industrial organization, game theory, information economics, and general equilibrium. The economic modeling methods and analytical tools are emphasized throughout the course.

**【Assessment】** Class quizzes (20%) + mid-term exam (30%) + final exam (50%)

**【Course Number】 30510883**

**【Course Title】** 经济增长 Economic Growth

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** ZHANG Hong

**【Brief Introduction】**

Economic growth is one of the two major issues in macroeconomics, and this course is designed to deepen the knowledge of intermediate macroeconomics in this direction. After explaining classical and neoclassical growth theories, the emphasis is put on the new growth theories that arose in the last two decades, including the analyses of technology, human capital, social infrastructure, natural resources, and so on. The aim is to understand the stylized facts in modern economic growth, to understand the future direction of China's economic development, and to lay down a theoretical foundation for further studies in advanced macroeconomics or economic growth and development.

**【Assessment】** Exam

**【Course Number】 30510893**

**【Course Title】** 财务报表分析 Financial Statement Analysis

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** LI Dan

**【Brief Introduction】**

a) Understand the construction and major elements in financial statements; b) Understand how firm performance is analyzed and valued. c) Understand the relevance of cash flow and accounting information. d) Know how to pull apart the financial statements to get the relevant information. e) Apply ratio analysis in valuation and decision-marking.

**【Assessment】** Exam

**【Course Number】 30510923**

**【Course Title】** 金融学原理 Principles of Finance

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** WANG Hao, HAN Xi

**【Brief Introduction】**

This course introduces students to the fundamentals and advances of financial theory. Financial success is the ultimate motivation for modern economic activities, which are necessitated by financial resources. The needs of consumers and businesses have been evolving to exhaust the full capacity that the financial system provides. The development and sophistication of the financial system are thus a continual process. Consequentially, the financial theory has been experiencing path-breaking advances along with the rapid development in financial practice. These developments are further accelerated by the extensive globalization of financial markets. This course provides an introduction to modern finance theory and its applications within a unified framework. The topics of the course include: (1) financial decisions and unifying principles of finance; (2) valuation of assets; (3) theory of interest rates; (4) portfolio theory; (5) asset pricing models; (6) introduction to corporate finance.

**【Assessment】**

**【Course Number】** 40510093

**【Course Title】** 国际会计专题 Topics on International Accounting

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** HAO Zhenping

**【Brief Introduction】**

This course comprises 12 topics. Every week there will be one topic, and four consecutive week lectures plus one week discussions and tests constitute one instruction unit. Totally there are three instruction units. Main contents of the course include: a brief history of international accounting, and international accounting environment; analysis of the reasons for the accounting differences existed among various countries; international accounting models; comparative accounting systems for some selected countries; international harmonization of accounting; preparation and analysis of international financial reports; technical issues such as translation of foreign financial statements, accounting for foreign currency transactions and inflation adjustments involved in international financial reporting; and managerial planning and control, financial risk management, international taxation and transfer pricing involved in international managerial accounting.

**【Assessment】** Evaluation without exam.

**【Course Number】** 40510293

**【Course Title】** 金融工程导论 Introduction to Financial Engineering

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** SONG Fengming

**【Brief Introduction】**

This course presents basic concepts and theories in financial engineering. The emphasis of the course is on no-arbitrage dynamic replication analysis, risk neutral analysis approach, and the interaction between them. The course aims to give a basic training to future professional financial engineers and risk managers. Students will learn designing, developing, and implementing modern financial contracts, and tools and methods of risk management.

**【Assessment】** Daily performance (30%) + final exam (70%)

**【Course Number】** 40510302

**【Course Title】** 商业银行管理 Commercial Bank Management

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** HE Ping

**【Brief Introduction】**

This course presents basic concepts and theories in monetary and banking economics. Topics covered in the course include: the structure of financial system, financial market and financial institutions, definition of money and role of bank, Money supply and demand, interest rate such as the determination of short-term interest rates and the structure of interest rate, and exchange rate and determination of exchange rate including PPP, IRP, monetary approach, asset approach, and monetary policies.

**【Assessment】**

**【Course Number】** 40510323

**【Course Title】** 中级财务会计（1）Intermediate Accounting I

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** LUO Ting

**【Brief Introduction】**

This course will focus on U.S. accounting standards, and the underlying issues of accounting will be incorporated with its actual development in China and international accounting standards. We will also cover various ethical issues related to the use and production of accounting information. All the materials will be taught in the class, and small subjects will be discussed to get a better understanding. This course is divided into two parts: the first part gives a brief review of the standard setting process of U.S. GAAP and describes the financial reporting environment. Financial accounting framework and accounting system are also discussed; the second part illustrates the treatment of basic accounting elements, including cash, inventories property, plant and equipment and intangible assets.

**【Assessment】** Assignment (10%) + 4 quizzes before class (open book, 20%) + mid-term exam (close book, 20%) + final exam (close book, 50%)

**【Course Number】** 40510343

**【Course Title】** 管理会计(1) Management Accounting I

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** ZHANG Haiyan

**【Brief Introduction】**

The goal of management accounting is to provide relevant information for top executives' decision, management accounting includes decision related cost measurement, pricing strategy, organization design, budgeting management and performance evaluation. This course will introduce concepts, methods and techniques related to management accounting. Topics can be summarized as the following three areas: (1) fundamental concepts and methods, including cost concept and classification, cost measurement, cost behavior and CVP analysis; (2) fundamental decision process, including marketing decision and production decision; (3) the specific decisions, including standard costing, static budgeting, flexible budgeting, organization design, transferring price, and performance evaluation etc. Based on the trends of modern management accounting, this course will also focus on activity-based costing (ABC), balanced scorecard (BSC), total quality management (TQM) and some other newly developed techniques in this area.

The objective of this course is to enable you to do the following:

1. Understand basic costing concepts, cost measurement methods and system;

2. Under the basic process of decision making in modernized enterprises;
3. Hold a whole picture of budgeting management and performance evaluation;
4. Can solve some management accounting problems in the real world.

The approaches of the course include literature reading, lecture, case analysis and discussion, homework, group report and presentation.

【Assessment】 Quizzes (30%) + case report (20%) + final exam (40%) + assignment (5%) + class performance (5%)

**【Course Number】 40510633**

【Course Title】 人身与健康保险 Principles of Insurance: Life, Health and Annuities

【Credits】 3 【Semester】 Fall

【Instructor】 WANG Kun, CHEN Bingzhen

**【Brief Introduction】**

This course will first examines the economic analysis of life and health insurance, various life, health, annuity, pension products, provisions and additional benefits, pricing of life and health insurance, life insurance company organization and regulation etc.. Students are required to analyze some actual problems in domestic life and health insurance market through internship, group projects and case studies.

【Assessment】 Exam

**【Course Number】 40510662**

【Course Title】 投资银行业务 Investment Banking

【Credits】 2 【Semester】 Fall

【Instructor】 WANG Hong

**【Brief Introduction】**

【Assessment】

**【Course Number】 40510723**

【Course Title】 保险经济学 Insurance Economics

【Credits】 3 【Semester】 Fall

【Instructor】 WANG Kun

**【Brief Introduction】**

The objective of this course is to provide the students with the modern fundamentals of the theory of insurance. We will develop the basic microeconomic models for settings in which economic agents are faced with uncertainty. A particular emphasis is given to insurance markets as means of transferring risk and wealth. The models we discuss, however, are adaptable to many other situations in finance and economics.

【Assessment】 Final exam (60%) + daily assignment (20%) + report (20%)

**【Course Number】 40510763**

【Course Title】 国际经济学 International Economics-Theory and Policy

【Credits】 3 【Semester】 Fall

**【Instructor】** LIU Qing

**【Brief Introduction】**

This course introduces to students basic concepts and theories in international economics. Topics covered in the course include: Ricardian trade model, Neo classical trade theory, The Heckscher-Ohlin, new trade theory-competitive advantage, International capital and labor movement, tariff and non-tariff barriers and protectionism, balance of payment and exchange rate, economic policy under fixed and floating exchange rate.

**【Assessment】**

**【Course Number】** 40510833

**【Course Title】** 公司财务(2) Corporate Finance II

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** CHEN Taotao, JIA Ning

**【Brief Introduction】**

This course discusses complex financial decisions facing by managers and the relevance of such decisions to firm value. These decisions pertain to capital structure, dividend policy, and mergers and acquisitions. The course is built around the following topics, dividend policies and firm value, main theories in capital structure, investment decisions under uncertainty, option theory and applications to investment decisions, managerial incentive and corporate governance, and psychological factors that affect investors' decisions.

**【Assessment】** Class participation (10%) + workshop (10%) + mid-term exam (30%) + final report (50%)

**【Course Number】** 40510872

**【Course Title】** 面向对象的分析设计方法 Object-oriented analysis and design methods

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** ZHU Tao

**【Brief Introduction】**

This course introduces the object-oriented (OO) analysis and design methods for information systems (IS) development. The unified modeling language (UML) and relevant IS development processes under the OO paradigm are discussed in detail. The main course contents are the discussion of basic IS development workflows under the OO paradigm, including requirement workflow, analysis workflow, design workflow, and implementation workflow. With the illustration of examples and exercises, the development tools and techniques used in such different workflows, including use case descriptions, UML diagrams, robustness analysis, class-responsibility-collaborator (CRC) card modeling, design patterns, coding and testing skills, etc., are demonstrated clearly so that the students could learn how to use them.

**【Assessment】** Assignment 1 (15%) + assignment 2 (15%) + assignment 3 (20%) + assignment 4 (40%) + class attendance (10%)

**【Course Number】** 40510882

**【Course Title】** 大型财务数据分析 Large Financial Data Analysis

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** JIA Ning

**【Brief Introduction】**

**【Assessment】**

**【Course Number】** 40510943

**【Course Title】** 产业组织理论 Theory of Industrial Organization

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** LI Mingzhi

**【Brief Introduction】**

This course will introduce you to the theory of industrial organization, an increasingly important field of applied microeconomics. The overall objective of this course is to help you think like an economist.

The theory of industrial organization is also called "the economics of markets", which analyzes the characteristics of a variety of market structures, the optimal strategies of firms and the roles of the government. The course will be a mix of modern IO theory and empirical observations about the structure of firms and markets, and behavior by firms that are not perfectly competitive.

**【Assessment】**

1. Class Attendance: Mandatory and not negotiable.

2. Assignment Based on Groups: each group should have two or three members

Homework: (20%) There will be a homework assignment about every two weeks

Term Paper: (15%) Every group will need to turn in a term paper based on reading of several related original IO papers

Mini case: (15%) Every group will need to complete a mini case study based on research in the Chinese context

Presentation: (10%) Every group will be required to make a presentation based on reading of several original IO papers

3. Final Exam (40%): Individual Evaluation

**【Course Number】** 40510973

**【Course Title】** 劳动经济学 Labor Economics

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** LIN Xu

**【Brief Introduction】**

This course studies the mechanism of labor markets. It covers the traditional topics in labor economics, which include the theories of labor demand and supply (both static and dynamic), labor market equilibrium, compensating differentials, human capital investments and returns, wage determination and structure, migration, gender and race discrimination, inequality, unionization, efficiency wages and work incentive scheme, and unemployment. It deals with the impacts of wages, prices, profits, working conditions, government policies and the like on the decision makings of firms and workers.

**【Assessment】**

**【Course Number】** 40510992

**【Course Title】** 企业资源规划 Enterprise Resource Planning

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** ZHU Tao

**【Brief Introduction】**

Enterprise Resource Planning is a business management system that integrates all facets of the business, including planning, manufacturing, sales, and finance, so that they can become more coordinated by sharing information with each other. ERP has been widely used in contemporary enterprises.

This course introduces the contents and application approaches of ERP. The students spend half the course time being taught and another half time using ERP software to do experiments. During the teaching section, several important topics are discussed in detail, including ERP concepts, modules, values, the ERP application approaches, and the future development of ERP. During the experiment section, the students will use typical ERP software to support the main transaction cycles in business organizations, including acquisition cycle, revenue cycle and accounting cycle. The objective of this course is to help students to learn about the operation and business processes of different functional departments in a typical enterprise, the functional modules in typical ERP software, how ERP can be used to support the business processes in business organizations, and the critical successful factors in ERP applications. These contents could provide a good starting point for students majoring in information systems & information management when they are involved in ERP-related jobs in the future.

**【Assessment】** Exam or non-test based evaluation

**【Course Number】** 40511003

**【Course Title】** 环境与资源经济学 Environmental and Resource Economics

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** CAO Jing

**【Brief Introduction】**

Nature and Purpose of this Course:

This course is an introduction of Environmental and Natural Resource Economics. The objective of this course is for students to learn how basic economic theory can be used to understand and analyze environmental pollution and resource degradation problems. The course covers both conceptual and methodological topics and recent applications. Examples of local, regional, national and international environmental and natural resource issues are presented and discussed.

The first part of this course is an introduction to the basic principles of environmental and resource economics; cost and benefit analysis. In the second part the focus is on environmental economics and policy, including economics of pollution control, valuing the environment, regional and global air pollution, water pollution and so forth. The third part is focused on natural resource economics, both renewable and non-renewable resources. The last part is on sustainable development and macroeconomic aspect of environmental policy, and Green Accounting.

**【Assessment】** Exam

**【Course Number】** 40511052

**【Course Title】** 行为研究的实验方法 Experimental Methods in Behavioral Research

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** PENG Kaiping, ZHANG Jin

**【Brief Introduction】**

**【Assessment】**

## **The Undergraduate Courses Taught in English in the School of Humanities and Social Sciences**

**【Course Number】** 40610083

**【Course Title】** 国际关系专业英语 Advanced IR English

**【Credits】** 3 **【Semester】** Fall

**【Instructor】** CHEN Maoxiu

**【Brief Introduction】**

**【Assessment】**

**【Course Number】**

**【Course Title】** Advanced Modal Logic

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** Johan van Benthem

**【Brief Introduction】**

**【Assessment】**

## The Undergraduate Courses Taught in English in the School of Law

**【Course Number】** 40661382

**【Course Title】** 网络知识产权 Intellectual Property in Cyberspace

**【Credits】** 2 **【Semester】** Fall

**【Instructor】** LI Xu

**【Brief Introduction】**

Digital copyright; the right to communication; P2P network and related infringements; creative commons and other licensing systems; digital rights management (DRM) and anti-circumvention clauses; sui generis database rights; software rights: copyright, patent, commercial secret, GNU/GPL and click-wrap contract; domain name disputes and resolution; protection of integrated circuits; unfair competition in the context of e-commerce.

**【Assessment】** Evaluation without exam

## **The Undergraduate Courses Taught in English in the School of Journalism and Communications**

**【Course Number】** 30670251

**【Course Title】** 专业阶梯英语(3)- 美国媒体文化 Intensive English for Journalism and Communications Studies III--U.S. Media Culture

**【Credits】** 1 **【Semester】** Fall

**【Instructor】** SHI Anbin

**【Brief Introduction】**

By dint of analyzing topics of US mass media and popular culture, this undergraduate course aims to provide journalism/communication majors with the conceptual and theoretical framework of media/cultural studies. Students are expected to attain a general overview of news, press, film, TV and internet and the historical evolution of popular/commercial culture in the US, the most powerful nation in the world. Equipped with a critical perspective and media literacy, students will be able to deconstruct the various myths of US media culture and to better understand the current US-led trend of media and cultural globalization.

**【Assessment】**

Participation (10%)—regular attendance and active participation in class discussion

\*Group presentation (20%)—Each student will be assigned ONE term and make a Power Point presentation (preferably with multimedia) in English, using case studies to explain the term.

\*Two short essays (40%) — Choose one topic assigned by the professor and prepare a short essay in English

\*Final oral exam (30%)—face-to-face Q/A with the professor during the exam week

**【Course Number】** 30670321

**【Course Title】** 专业阶梯英语(5)-公共关系与广告 Intensive English for Journalism and Communications Studies V-- Introduction to Public Relations and Advertising

**【Credits】** 1 **【Semester】** Fall

**【Instructor】** Bill Valentino

**【Brief Introduction】**

The course aims at teaching the students the basics of public relations and advertising, including the basic terms and theories, meanwhile, the course aims at improving students English proficiency, both in written and spoken.

The class is proceeded mainly by the instructor's lectures. The instructor will make full use of his own long experience in public relations field to introduce the basic elements of PR theories, PR planning and process. Case studies will be frequently used in the lectures. And students' participation is encouraged so that students can get a clearer sense of the public relations. The writing of press release will also be taught in the class, so as to make students more involved in public relations and improve their written English.

**【Assessment】** Class attendance (15%) + class participation (15%) + assignment (20%) + oral English (10%) + final exam (40%)