Courses in English

**College of Public Administration**

1. *An Introduction to Western Philosophy with Integrated Readings*:
   An Introduction to Western Philosophy with Integrated Readings is a bilingual course for undergraduates of the Philosophy Department, taking the original works of contemporary western philosophy as its main contents.

2. *Ethics*:
   Ethics in English is a specialized course in English for Ethics postgraduates, mainly introducing the ideological thought of contemporary western Ethics.

**College of Chemistry and Chemistry Engineering**

1. *Inorganic Chemistry*:
   Inorganic Chemistry is learned by the combination of class teaching and students self-study to make students know how to express basic principles of chemistry such as atomic structure and periodic law of elements, basic theory of chemical bond, chemical thermodynamics, rate of chemical reaction and chemical balance in English, learn related inorganic chemical terminology, further understand and master basic knowledge of the structure, property and function of important elements and its compound, know the law of chemical reaction and its feature of changing and acquire basic training in improving students' abilities of English expression and reading at the same time.

2. *Organic Chemistry*:
   Through the combination of teacher's class in English and students' self-study, this course aims at helping students to know the English naming rules of organic chemical compound, the ways of saying different organic reaction, molecule structure and professional terms, and be capable of reading and spelling the basic professional vocabulary in English, thus assisting students in possessing the exchange capability in professional academic conference and laying a good foundation for students' future research work or professional exchange.
1. **Gerontological-nursing:**

Gerontological-nursing is a specialized course for students major in nursing. Through the teaching of the concept of geriatric nursing, the related theories of aging, the knowledge of mental hygiene of the aged, and through the introduction of gerocomia, the method of nursing the daily life of the aged, with the combination of clinical novicication and practice, this course aims at letting the students get hold of the relevant knowledge and features of gerontological-nursing, and qualified themselves well with nursing skills.

2. **Fundamental Nursing:**

Fundamental Nursing is an important backbone of professional nursing courses and one of the basic professional courses. It includes both basic theoretical knowledge and the operation of nursing skills. Key chapters cover pressure ulcer care, prevention and control of hospital infection, vital signs assessment, diet and nutrition, excretion and nursing, medication, transfusion and blood transfusion, and so on.

3. **Pharmacology:**

As the fundamental professional discipline of iatrology and pharmacy, pharmacology is the study of the interaction between drugs and the body and its principles, and provides basic theories for rational drug uses in clinic and disease prevention. Among the courses of iatrology, pharmacology is based on physiology, biochemistry and microbial pathology, serving as a bridge discipline for clinical practice. The task of this course is: through the teaching of pharmacology theories and experiments to provide a theoretical basis for rational drug uses in clinic and disease prevention; at the same time, by grasping the basic theories, basic knowledge and basic skills of pharmacology, cultivating the students with the ability of observing, analyzing, synthesizing, and the ability of working independently to solve problems, to lay the foundation for training pharmacy professionals. (For pharmacy, clinical medicine undergraduate)

4. **System Anatomy:**

System Anatomy is a science of describing the normal function of the morphological structure of human organs and its origin and development in accordance with human organs. It is concluded to the domain of morphology in bioscience, and it is an important basic course in medical science, one of the main branches of human anatomy. The task of teaching system anatomy is to understand and grasp the normal morphological characteristics, location adjacent, the rhythm of growth and development and its functional significance of human organs, and to lay the morphological foundation for learning other basic medical and clinical courses. Only master the normal morphological structure of human body, can we understand the physiological and pathological process of human body correctly, determine the body's normal and abnormal properly, differentiate physiological and pathological conditions,
and thus diagnose the disease and offer valid treatments. This course is face to professional students of clinical medicine, nursing, pharmacy, prevention and other majors.

5. Diagnostics:
Diagnostics is a very important bridge course to the transition from basic medicine to clinical medicine. It provides great practical significance for the latter theoretical study and practice of the specialist courses (such as internal medicine, surgery, gynecology and pediatrics). Its mission is to enable students learn to collect and analyze objective human body data, master basic theories, basic knowledge and basic skills of disease diagnosis, lay the foundation for all clinical courses for further study, through the study of diagnosis principles and theory practicing.

6. Medical Immunology:
Medical immunology mainly deals with the organization and function of the immune system of human body, the mechanism, discipline and effect of immune response, the pathogenic mechanism on Immunology, prophylaxis and remedy mechanism. It is a frontier course as well as an important fundamental course of such medical majors as clinical examinations, prophylaxis, nursing, Pharmacy, etc.

7. Instrumental Analysis:
Instrumental Analysis is a fundamental course of pharmacy majors mainly including electro analysis and chromatography, spectrography, nuclear magnetic resonance, etc. the instruments and detecting methods are the most advanced and classic ones in the world. In its follow-up courses such as Pharmaceutical Analysis, Medicinal Chemistry, Natural Medical Chemistry all have close relationship with it or apply the instrumental methods mentioned in this course. Bilingual teaching is offered in certain part of this course so as to lay a solid foundation for the majors to read English materials in this field and to facilitate the international academic exchanges.

8. Medical English:
Medical English is an optional course for students majoring in Clinic Medicine, Clinic Examination, and Preventive Medicine. This course covers many areas of Basic Medicine including such aspects as tissue, organ, system, disease mechanism, disease prophylaxis. Students can learn word-formation of professional terms, grammatical knowledge of English for science and technology so as to lay a solid foundation to learn advanced medical knowledge in foreign developed countries.

9. Pharmaceutical English:
Pharmaceutical English is an optional course for pharmacy majors. It mainly introduces basic knowledge about pharmacy and medicine. I also supplement related materials about English instruction book about medicine, word-formation based on the features of pharmacy major. This course can lay a foundation for the pharmacy majors to further their study in this field and to carry on international exchanges.
10. Clinical Pharmacokinetics:
Clinical Pharmacokinetics researches the functions of medicines to human body, studies the dynamic rules of assimilation, distribution, excretion and metabolism of medicines in human body, demonstrates the relationships between internal as well as external factors and Pharmacological effects.

11. Pharmacognosy:
The teaching object of Pharmacognosy is to help the students understand the standard and steps of crude drug identification through systematic and all-around learning. Through this course, students can master the basic skills and theories in the research and evaluation of the quality of crude drugs. The bilingual teaching method can help students understand the unique cultural heritage of pharmacy and expressions of the professional terms. In this way, international talents who keep pace with the times can be nurtured.

College of Commerce

1. International Finance:
International Finance, a science on applied economic theories, studies that when balance of both internal and external structures of a nation can be realized at the same time from the perspective of monetary finance under the influence of open economy. The aim of the course is to make students master the fundamental theories of international finance, have a better understanding of the position and role of the international finance in the economic development of a nation, know well the operation of the international finance and master the necessary skills.

2. International Economics:
International Economics is a core course for Economics major in colleges and universities. The objective of the course is to learn and master the theory of how to effectively realize the distribution of scare economic recourses in the world through learning the theories and policies of the international economy, know policies adopted by a nation in the economic relations and grasp the methods of how to analyze the real problems in the international economy.

3. Strategic Management:
The curriculum includes outlines of strategic management, external and internal environment analysis, (competitive strategy analysis), strategy formulation, strategy implementation and control. The purpose of the course is to enable student to grasp the constitutive ways of strategic management by introducing the methods like self-study lectures and case analysis. Consequently students can master the basic skills and have ability of comprehensive analysis and adaptability on strategic management.
4. **Econometrics:**
Econometrics, based on statistics and mathematics, empirically study the causality of Economics and economic theories. The aim of the course is to let students know how to design and build model and make statistical estimation, including operating practice.

5. **Marketing Research:**
Marketing Research is mainly about the collection, designation, analysis and report of marketing information and lets students know how to solve the specific marketing problems. The course, with a clear applied orientation, is to introduce how to do research and analyze data, including operating practice and questionnaire design.

6. **International Payment:**
International Payment mainly introduces the satisfaction and presale of transnational capitals. The purpose of the course is to let student know well the theories and practical operations of how to use capitals to solve liabilities through the financial system, by introducing the means, modes and receipts of payment.

**College of Polytechnic**

1. **Signals & Systems:**
Signals & Systems is a professional basic course of Electronic Technology Application, Electronic & Information Engineering and Communication. This course describes systematically the basic concept, the basic theory and the basic analytic approach, in the purpose of letting the students get good command of the time zones of signals and systems, and the basic theory & method of the transform domain analysis. Furthermore, helping the students understand the mathematical, physical and engineering concepts of Fourier transform, Laplace transform and Z transform. Thus, the students can apply the theory and method to analyze and solve practical problems in reality.

2. **Computer Networks:**
By studying the basic concept, theory, technique and method of computer network theory, get acquaintance with the theory of computer network. Get a general understanding of the developing law of network technique. Study the basic theory of computer network, networking protocol and practical network technique in order to lay the foundation of learning the later courses, compiling network software and designing networks.

Object-Oriented Programming: It is a language course of computer programming. It is in the purpose of increasing the students’ sensation recognition of the Object-Oriented method by learning the grammatical rules of c++, thus they can adopt the method of Object-Oriented Programming, laying the foundation of compiling reliable utility program through C++.
3. TCP/IP Protocols:
TCP/IP Protocols is one of the core courses of the computer major. It mainly describes the key protocols of Internet, that is, the basic concepts, operational principles, operational processes and installing methods in TCP/IP protocols stack. It is a compulsory course of the computer majors, and also a core course for the further study of network especially the operational principles of Internet. As the advanced technologies are still in the possession of Western Counties, most of the related textbooks and teaching materials are written by experts in those countries. The original text are English, although there are translated Chinese versions, bilingual teaching can not only help to grasp the essence of the original texts, but also to improve the students’ professional English, creating favorable conditions for cultivating students who have practical skills, global vision and world horizon.

College of mathematics and Computer Science

1. Mathematical Analysis:
Mathematical Analysis is one of the most important elementary courses of Mathematics and applied mathematics, information and calculation, probability and mathematical statistics in college with the period of three terms. The main contents are: unitarian differential calculus and integral calculus, multi-variant integral calculus and progression.

2. Topology:
Topology, a course for undergraduates in College of Mathematics, provides students with the knowledge of different kinds of topological spaces such as distance space, commercial space; continuous mapping and bi-continuous mapping and the qualities of topology such as its connectivity, compactness, accountability, separation. Topology is an indispensable basis in modern Mathematics and has been widely applied in different branches of Mathematics, theoretical physics, computer network and other fields.

College of Journalism and Communication

Brand strategies-- integrated marketing communication:
Brand strategies-- integrated marketing communication is a step-by-step specialized course for junior at advertising department. The course refers to the works of a famous American integrated marketing communication expert George E. Belch, Terence Shimp, Schultz Don E. It reconstruct the teaching program on the basis of the students’ language ability and special basis and give consideration to the training of listening, speaking, writing and translating to broaden the special field of view of students and teachers.
College of Tourism:

1. Hotel Management:
This course is one of the main basic courses of tourism management majors, aiming at training senior managers in this field. Students who study this course should master the basic theories of modern hotel management; take in the advanced management methods of developed countries; understand the current situation, trends, basic service and managing strategy of modern hotels in our country, so as to form a solid foundation for future managing work in hotels or in tourism industry.

2. A Comparison of Chinese Culture & World Culture:
This course helps the students understand traditional Chinese cultural phenomena by systematic introduction of Chinese culture such as festival, religion, architecture, fine art, drama, etc. Moreover, students will be broadened on their cultural vision and have a more tolerant cultural psychology through the comparison of Chinese culture and world culture.

3. Sustainable Tourism Development:
This course analyzes the related theoretical schools and tools concerning the sustainable tourism development based on the introduction of economic, environmental and social issues brought by tourism development, helping the students understand the research methods in terms of sustainable development of tourism. It also introduces the latest achievement in this field.

4. Enterprise Strategy Management:
Enterprise Strategy Management is a basic compulsory course for tourism management majors. It investigates the management theories that can reflect the enterprises in a comprehensive as well as a strategic way, namely analyzing, determining and evaluating the enterprises’ strategies and conducting an all-around analysis of the implementation of it. This course is the basic theoretical foundation of such courses as agency management, hotel management and scenic-spot management, etc.
This course can also help the students get to know the basic frames of enterprise strategy management, master the major evaluation methods in this regard and the basic theory concerning analysis, determination and formulation of the strategies. Promoting the students’ ability to integrate theory with practice, correctly understand every choice our country has made in different historical times and improve their ability to analyze and solve problems.

5. Management Communication:
The teaching purpose of Management Communication is to enable students to understand the basics of management communication, master the basic strategy of communication, familiar with several commonly used forms of communication, combining with case discussions to master the basic skills of communication,
particularly speech, team communication and other basic skills in order to lay the foundation of effective communication in work and life.

6. Hotel Quality Management:
This curriculum has comprehensive characteristics, it involves the widespread specialized knowledge, the higher specialized technical degree, the stronger practicality, and so on. It is a special course for student to understand and study quality control synthesized. This curriculum content not only includes the quality control aspect and the specialized knowledge, but also includes the related management idea, the management method and so on. The goal is to let the students understand the hotel quality control better and master the knowledge and the skill of hotel management more comprehensively.

7. Task English for Hotels:
This course aims at helping the students master various English expressions in practical work based on the reality of working in hotels. Students mainly study practical English useful in different departments of hotels and working knowledge of hotel reservation staff, receptionist, consultant, cashier, telephone operator, reservation staff in Food & Beverage, servers, etc. Apart from this, this course offers English material related to hotel management to promote students’ ability to read foreign materials and speak English on topics related to this aspect.

8. Folklore Culture of China:
This course mainly deals with the objects and mission of Chinese folklore culture, the common features of Chinese folklore culture, accepted oral communications, body language communication, folklore communication, subject psychology, folklore taboos, communication psychology, folklore communication adjustment, proverb communication, the custom of worshiping ancestors in ancestral temple, researching methods in folklore culture, etc.
This course helps the students understand the basic theories and contents of Chinese folklore culture and promote their ability to tackle with various problems. This course is a practical course integrated by folklore study and other humanities such as history, sociology, psychology, etc. it is the prerequisite for learning folklore communication and social activity history. It bears on the following characteristics: 1) logic and theoretical 2) intensive knowledge points; 3) large amount of information with both longitudinal and crosswise historical connections.

**College of Physics and Information Science**

**Engineering Circuit Analysis:**
Engineering Circuit Analysis is the specialized core course of specialty electron and communication. It is the basis of courses Low-Frequency Electronic Circuit, High-Frequency Electronic Circuit and Signal and System. The course is divided into three parts: the analysis of direct-current circuit, the analysis of dynamic circuit and
the analysis of alternating current circuit. It mainly introduces fundamental theorem, fundamental formula and fundamental analysis in finding the solution of response circuit.

College of Life Science

1. Cell Engineering:
Based on the theories and methods of modern cell biology, developmental biology and genetics and molecular biology, and the need and design of people, cell engineering is a biology engineering technology based on genetic manipulation on cells, recombining the structure and container of cells to change the structure and function of organism, that's to say, to breed and foster needed new species through the methods of cell fusing, nuclear material transplanting, chromosome or gene transplanting and germs incubating etc..

It is a multidisciplinary combining the theories of bioscience and engineering. Cell engineering is an essential part of modern biological technology, at the same time; it's an important technological tool for the research of modern biology. Its research technology involves organelle, cell, tissue and organ levels, including various in vitro operation based on engineering theory and methods. What’s more, it is a required course for university students majored biotechnology.

2. Plant Biology:
Plant Biology is an introductory profession course of the national base which cultivating talents and technical personnel of life and science. This course adopts the method of bilingual teaching: using original textbooks from abroad, and introducing the latest international development. Also, this course is planned to teach in English through blackboard handwriting, intercommunication between teachers and students, homework and term examination, providing a good language circumstance for the students to learn plant physiology by reading English books directly. Thus try to let our teaching be in line with international level, help the students lay the foundation of reading English documentation and communicating well in the international academic exchange (especially in English writing and oral expression).

3. Transgenic Animal Technology:
According to the combined efforts of Professor Xiang Shuanglin and Professor Zhang Jian, transgenic animal technology gives lectures on the development of transgenic animal technology and its frequently-used researching methods, which are based on the two professors’ latest scientific researches. The main contents include: animal breeding and cultivation experiments, gene expression regulation, transgenic preparation and report of the host of animals, gene’s mapping targeting and conditional targeting, transgenic and its expression detection, the application of transgenic animal technology in biological and medical research, the application of transgenic animal technology in biological medicine, xeno-transplantation, safety and ethical issues of transgenic technology, and so on.
4. Biochemistry:
The bilingual teaching of biochemistry was started from 2000 as the first bilingual teaching course promoted by our college. It aims at keeping pace with the development of modern higher education, being in line with the international bioscience domain, and cultivating creative professionals of high level and high quality.
This course is an important basic course that all master candidates of all domains of biological have to be tested when they enter university. It is not only the leading discipline in the domain of bioscience research, but also the focus of researching. Therefore, the bilingual course teaching is of great significance.

5. Molecular Basis of Aging
Aging mechanisms has been extremely complicated since it relates with a large number of branches of biomedical sciences from whole animal level to molecular level. This course is discussion and exploring from a key biochemical mechanism of aging up to general theory of aging which has been developed recently in the field including our own studies.

College of Resources and Environment Science
1. Architecture Engineering:
Main contents: introduction of basic building material and architecture; the function of architecture; architecture's material technology; architecture image; outline of civil architecture construction; building material; wall; foundation; ground floor; stairways and elevators; doors and windows; roof; deformation joint; the materials' performance of concrete structures; cross section bearing capacity calculation of the forced member of reinforced concrete axis; cross section bearing capacity calculation of flexural member of reinforced concrete; the bearing capacity calculation of oblique section of flexural member of reinforced concrete.

2. Finite Element Methods in Structural Analysis:
Main contents: finite analysis of the bar system; finite analysis of elastic plane problem (the unit of constant strain triangle and rectangular bilinear properties); finite analysis of space and axial symmetry problem; plate and shell finite element (R.J.Melosh 12 DOF rectangular plate bending element, DOF triangle plate bending element, analysis of flexible base plate, SAP plate bending element, plate bending element influenced by cross shearing, generalized conforming element); brief introduction of finite element method for non-linear analysis (numerical solution technique of the system of non-linear algebraic equations, the finite analysis of the material non-linear, the finite method of excessive displacement).