About Nanjing University

Situated in the old capital city of Nanjing, Nanjing University (NJU) has a history over one hundred years long and is one of the most prestigious institutions of higher learning in China.

As a comprehensive research university, NJU ranks top among Chinese universities in terms of both quality and quantity of research papers listed in the Science Citation Index (SCI), enjoying a high reputation both at home and abroad. Also, with 16 disciplines ranking top 1% worldwide in 2016 ESI Rankings, NJU ranks the 130th in 2016 QS World University Rankings, the 7th in China.

NJU boasts a strong team of faculty in humanities, social sciences, natural sciences, medicine and engineering. Many famous scientists and scholars have studied or worked here, including 38 Academicians, 115 Chair Professors, 95 Distinguished Visiting Professors of the “Chang Jiang Scholars Program”, and 2 overseas scholars under the “National Thousand Talents Plan”. NJU also has invited many world-famous scholars (including some Nobel Prize laureates), politicians and social activists as our honorary or visiting professors.

Now NJU has three beautiful campuses, namely Gulou, Xianlin, and Pukou, and Xianlin campus now serves as the main campus, holding most of the teaching and students’ activities. Presently, NJU has over 32,999 full-time students, among whom about 3216 are international students from all over the world.

NJU also has been among the most active universities in international cooperation and academic exchanges. So far, it has established partnership with over 200 institutions of higher learning and research institutes in more than 70 countries, including 19 ongoing double-degree programs for both undergraduates and postgraduates. To promote international education, NJU has also developed 105 foreign-language-taught international courses in more than 20 departments for students covering both Natural Sciences and Social Sciences.

Faced with new challenges and opportunities today, NJU is vigorously promoting international communication and cooperation in multiple fields and is striving to be geared to international standards in every aspect.
CONTENTS

■ About Nanjing University / P3

■ About International Courses / P6 - 7

■ Chinese Culture / P8 - 9
  Institute for International Students / P8 - 9

■ Chinese History / P10 - 12
  School of History / P10 - 12

■ Chinese Law: Global Insight / P12 - 19
  Law School / P13 - 19

■ Global Environmental Change And Management / P20 - 26
  School of Geographic and Oceanographic Sciences / P20 - 23
  School of Atmospheric Sciences / P24
  School of Earth Sciences and Engineering / P25 - 26

■ Chinese Business And Economy / P27 - 33
  School of Journalism and Communication / P27
  Business School / P28 - 33

■ Global Culture / P34 - 38
  School of Foreign Studies / P34 - 37
  Department of Philosophy / P38
  School of Architecture and Urban Planning / P38

■ Biomedical Engineering And Applied Science / P39 - 41
  School of Engineering and Applied Sciences / P39 - 41

■ Science Foundation / P42 - 47
  School of Management and Engineering / P43 - 44
  KuangYaming Honors School / P44
  School of Electronic Science and Engineering / P45
  School of Astronomy and Space Science / P46
  School of Physics / P47
  Software Institute / P47
  Department of Computer Science and Engineering / P47

■ Sociology / P48 - 49
  School of Social and Behavioral Science / P48 - 49

■ Other Courses / P50 - 51
  School of Government / P50 - 51
  School of Information Management / P51
About International Courses

Nanjing University (NJU) is very active in international cooperation and academic exchanges.

NJU offers student exchange programs of varying lengths at university-wide level. It also has established 19 double degree programs for both undergraduates and graduates. In every semester, NJU accepts a large quantity of international exchange students. Presently, there are altogether 3,216 international students from all around the world.

For these international students, NJU provides 105 foreign-language-taught international courses covering Law, Business, History, Astronomy and Space Science, Physics, Geography and other subjects. Related courses are integrated into one discipline with at least 4 courses for students, including common courses, core courses and selective courses.

Besides English-taught international courses, there are also courses in French, Russian, Korean, Japanese and German, providing a wide variety of choice for international students. All international courses are taught by leading professors and scholars with rich experience in teaching and with great achievements in research, and some of them are taught by overseas scholars and invited professors.
**Chinese Culture**

<table>
<thead>
<tr>
<th>Institute for International Students</th>
</tr>
</thead>
<tbody>
<tr>
<td>The Great Thinkers of China -- Vaitkevicius Julius</td>
</tr>
<tr>
<td>Aspects of Chinese Culture -- Chen Aimin</td>
</tr>
<tr>
<td>Chinese Economy -- Chen Zhihong</td>
</tr>
<tr>
<td>Modern Chinese Literature -- Ding Fangfang</td>
</tr>
</tbody>
</table>

**The Great Thinkers of China**

**Lecturer:** Assoc. Prof. VAITKEVICIUS Julius (YANG Juliuz)

**School:** Institute for International Students  **Credit:** 4

**Term:** Spring Semester  **Credit Level:** Undergraduate

This course serves as an introduction to some of the most influential thinkers of China. As this course is designed to be more interactive than academic, students will not only learn about the intellectual and historical shell of the subject matter but also engage with it through class discussion, by relating classical Chinese thought to their own lives, and by translation and discussion of short passages. Through the course students will be also introduced to the ideas of Philosophy of Life, and how those ideas can help us to approach such ancient Chinese thinkers as Confucius, Mencius, Laozi, Zhuangzi and others. By discussing and thinking about what Chinese thinkers said, thought or did in the past we also raise questions and look for answers to question like: What is the meaning of life? Can depression be healed? What is one’s life mission? How to develop one’s potential? What question would I ask if I met a sage? Can the heart think?

**Aspects of Chinese Culture**

**Instructor:** Prof CHENG Aimin

**School:** Institute for International Students  **Credit:** 2

**Term:** Spring Semester  **Credit Level:** Undergraduate

This course will explore the foundations of Chinese civilization and the dimensions of Chinese culture. It will pay particular attention to the relationship between Chinese culture and the present-day life of the Chinese people and to the different elements of the culture which are under the present social structures, belief systems, literature, arts, customs, etc. The course aims at providing students with a deeper knowledge of Chinese culture, thus enabling them to better understand China and to appreciate their experiences in Nanjing or other parts of China during their Semester or Summer Study Abroad programs.

**Chinese Economy**

**Lecturer:** Associate Professor CHEN Zhihong

**School:** Institute for International Students  **Credit:** 2

**Term:** Spring Semester  **Credit Level:** Undergraduate

This course provides insights to why China was so advanced in pre-modern times, what caused it to become so poor for almost two centuries, how it grew into a market economy, where its potential is for continuing dynamic growth and what further reforms are needed to complete the transition to a well-functioning, advanced market economy. Students can have comprehensive idea about Chinese Economy in terms of agriculture, industry, economic system in China, countryside economy, urban reform and state-owned enterprises reform, finance, etc., so that students can have objective judgement about China and Chinese economy.

**Modern Chinese Literature**

**Lecturer:** Associate Prof. DING Fangfang

**School:** Institute for International Students  **Credit:** 2

**Term:** Spring Semester  **Credit Level:** Undergraduate

This course is a study of modern Chinese fiction. The historical development of modern Chinese fiction will be introduced and the impacts of western literary trends or thoughts on fiction writers will also be explored. In addition, representative short stories and novels of different schools will be appreciated and studied in depth.
The Chinese City from 16th to 19th Centuries

**Lecturer:** Prof. LUO Xiaoxiang  
**School:** School of History  
**Credit:** 2  
**Term:** Spring Semester  
**Credit Level:** Undergraduate  
This course starts from the general discussion of the characters and development of Chinese cities in late imperial China. The second part focuses on special issues of urban studies: urban politics, urban space, urban community, urban culture and the development of new market towns in Jiangnan area. The last part deals with the modern transformation of Chinese cities in the 19th and early 20th centuries. Students who successfully complete this course should be able to demonstrate familiarity with urban life China and describe how they have changed over time. At the same time, they should reflect critically on spatial, political, social and economic aspects of urban life in different historical contexts.

Chinese Art History

**Lecturer:** Prof. ZHANG Liangren  
**School:** School of History  
**Credit:** 2  
**Term:** Spring Semester  
**Credit Level:** Undergraduate  
This course will introduce to students the basic method of art history, formal analysis, and present various types of art objects through Chinese history, including painted pottery of the Neolithic Age, bronze vessels of the Bronze Age, tomb murals of Han Dynasty, Buddhist art of Wei, Jin, Southern and Northern Dynasties, Literati paintings of the Song and Yuan Dynasties, stonewares of the Song Dynasties, and architecture and gardens of the Ming and Qing Dynasties, and understand the political, economic, and cultural context of the development of Chinese arts. It will also provide an opportunity for students to study an art object of their choice with the method of formal analysis.

Ancient Chinese History

**Lecturer:** ZOU Jinfeng  
**School:** School of History  
**Credit:** 2  
**Term:** Winter Semester  
**Credit Level:** Undergraduate  
This course, as a general survey on the Chinese civilization, will provide an access to understand China in the historical context, including the rise of Chinese civilization, the dynastic history, and ethnic history and thoughts that have significantly influenced the development of Chinese civilization. Students will be encouraged to investigate some specific issues, which have been research focuses in recent years, such as the changes in institution, the cultural evolution, the social transition, and so on.

Chinese Society of Ming and Qing Dynasties

**Lecturer:** Prof. LUO Xiaoxiang  
**School:** School of History  
**Credit:** 2  
**Term:** Spring Semester  
**Credit Level:** Undergraduate  
As the last two dynasties of imperial China, Ming Dynasty (1368-1644) and Qing (1644-1911) Dynasty not only reflected both the achievements and problems of traditional China, but also determined the road of Chinese modernization. This course introduces several key features of Chinese society during this period, including the civil service examination and society mobility, the formation of educated elite and literati culture, women’s life and gender issues, central government and local society, commerce and merchants, popular religion and community organization. It is designed to provide students a comprehensive understanding of Chinese society, in the past and present.

Chinese Students in the USA, Europe and Japan 1871 to 1949

**Lecturer:** Dr. Ines Eben v. Racknitz  
**School:** School of History  
**Credit:** 2  
**Term:** Fall Semester  
**Credit Level:** Undergraduate  
In this class, we follow the paths and biographies of students, who went abroad to study during the late Qing and Republican era. We will ask about their situation and studies abroad: What did they study? How long did they stay abroad? How were their experiences abroad? We will also follow their biographies after their return to China and ask, in what way, their experience abroad influenced their course of life back home in China. This class is a contribution to Modern Chinese History.
Important Archaeological Findings and Development of Conservation Research in China

**Lecturer:** Associate Prof. WANG Xiaogi
**School:** School of History **Credit:** 2
**Term:** Spring Semester
**Credit Level:** Undergraduate

The course presents an introduction to the fundamental principles of archaeological method and theory, findings and excavations, as well as archaeological science and a number of distinctive conservation applications in a wide variety of Chinese archaeological sites and artifacts. It adopts a multi-syllabus approach appropriate to the students who are not only interested in Chinese ancient culture, but also concerned about the practices in excavations, in museums and in heritage work, especially dramatic changes in many fields contributed by scientific advances. The syllabuses include diverse themes relevant to representative archaeological findings, accompanied with science involvement and conservation issues to raise students’ awareness of some of the more intriguing and challenging aspects of archaeology in China today.

Chinese Foreign Policy

**Lecturer:** Prof. ZHU Feng
**School:** Institute of International Relations **Credit:** 2
**Term:** Autumn Semester **Credit Level:** Undergraduate

This course is purporting to lecture on evolution of China’s foreign policy since 1949 with focus on its goal, interest calculus, and essential means. The course will provide students with analytic framework to examine how a rising power addresses its foreign interests and carry out on its external relations. The course will offer a concise but explicit interpretation of China’s foreign policy making process and domestic structure which affect its policy outcomes. The course will also pick up a number of essential bilateral ties, for instance, China-US relations, China-Japan relations and China-ASEAN relations, to demonstrate leading characters of its foreign policy.

Modern History of Sino-American Relations

**Lecturer:** Associate Prof. ZHENGAnguang
**School:** School of History **Credit:** 2
**Term:** Fall Semester
**Credit Level:** Undergraduate

The Sino-American Relationship is the most important bilateral relationship in the world, which is even beyond the bilateral relationship in the greater system of geopolitical and global framework. The purpose of the course is to provide the students with a historical overview of the long and complicated Sino-American relationship, with a special focus on the U.S. approach to the problem of divided China and diversity of China. The course will deal with diplomacy and war, mutual perceptions, hot issues. We will also focus on the recent developments in the relations, development of the PLA, trade issues, maritime disputes in East Sea and South China Sea, internet security and issues of Taiwan. Also, we will address post-9/11 Sino-American relations and the debate about the rise of China and its implications for the U.S. We will explore the domestic dynamics in both countries which made the basis of mutual relation.

Private International Law

**Lecturer:** Associate Prof. JIAO Yan
**School:** School of Law
**Credit:** 3 **Term:** Spring Semester
**Credit Level:** Undergraduate

This course aims to lecture on China’s Private International Law (PIL) or Conflict of Laws, which will be applied to the civil and commercial cases with foreign elements by Chinese courts. Following the proceedings of foreign cases dealt with in courts, the course will discuss issues of jurisdiction, choice-of-law, and recognition and enforcement of foreign judgments sequentially. The course will offer a clear interpretation of China’s PIL rules, and analysis of important judicial cases, most of them decided by the Supreme People’s Court, will be provided to help students understand the function and application of those rules. The course will also be conducive to form a comparative and international perspective of law.
Jurisprudence II

Lecturer: Asso. Prof. CAI Lin
School: Law School Credit: 2 Term: Spring Semester
Credit Level: Undergraduate

What is LAW? What is the normativity (die Geltung) of law? What is the relationship between law and moral? What are legal rights and duties? What does it mean for a judge to “apply the law”? This course is purporting to lecture on these basic questions of legal philosophy in four chapters: the concept of law, legal norm and legal system, right, and the legal methodology. The course will also provide two brief introductions on history of Chinese jurisprudence and main theories of western jurisprudence. The writings of jurists, for instance, Hart, Fuller, Dworkin, Raz, Kelsen etc., are necessary for discussion in the course.

Chinese Contract Law

Lecturer: Professor FANG Xiaomin, Associate Professor HUANG Zhe
School: Law School Credit: 2
Term: Spring Semester Credit Level: Postgraduate

This course is purporting to lecture on effect of the contract, fulfillment of the contract, performance of the contract and liability for breach of duty. As a seminar of Chinese Contract Law for foreign students, the course will provide students with a comparative perspective to analyze Chinese Contract Issues. After successful participation, students are able to master the general knowledge of Chinese Contract Law. They can do the case by the help of the law. They still know the differences between the Chinese Contract Law and the German Contract Law.

Chinese Legal History and Legal Philosophy

Lecturer: Asso. Prof. CAI Lin Term: Fall Semester Credit Level: graduated Credit: 3

This course is purporting to lecture on a general survey of Chinese legal history and legal thoughts. As an overview, the content of the lecture, especially on the part of legal history, cannot be organized as an introduction of legal institution dynasty by dynasty. The connection between traditional legal institution and Chinese legal thoughts will be the key point focused. In ancient China, there was not any legal philosophy as modern legal philosophy; all of legal thoughts were interwoven into the whole Chinese philosophy. Therefore, mostly the course uses legal “thoughts” but not philosophy. But of course, Chinese philosophy is necessary for understanding and interpreting legal institution especially in the ancient China.

Chinese Economic Law

Lecturer: Professor FANG Xiaomin, Associate Professor LV Bingbin
School: Law School Credit: 2
Term: Fall Semester Credit Level: Postgraduate

The content of the Course is specially designed according to the characteristics of the knowledge background and the academic interests of foreign students. Both the basic theory and practice of economic law with focus of theory and practice of China’s socialist market economy, of Chinese Foreign Investment Law, Competition Law, intellectual property law etc. are included in the Course.

Chinese Company Law

Lecturer: Professor FANG Xiaomin, Dr. ZHOU Mei, YANG Yang
School: Law School Credit: 2
Term: Fall Semester Credit Level: Postgraduate

The company law promulgated since 1993, has been in the development of national economy and occupies an important position in the construction of the rule of law. During the company law passed in 1999, 2004, 2005 and 2013, the four times of revision, the revisions reflect the continuous innovation of the company law, constantly adapt to the economic and social development. Especially in the latest two revisions in 2005 and 2013, company law has made very important revisions in the corporate governance structure, institutional responsibility and registered capital system.
Chinese Tort Law

**Lecturer:** Associate Prof. QI Xiaokun  **Credit:** 2

**School:** Law School

**Term:** Summer Semester  **Credit Level:** Postgraduate

This course puts the Tort Law in the background of China's civil legal system. It mainly introduces and analyzes the main theories and practices of tort law in China, based on the Tort Liability Law of the People's Republic of China. At the same time, combined with the development of Chinese tort law and its historical background, as well as the typical cases, students can have a more comprehensive and in-depth understanding of the law, and acquire the ability to analyze theoretical problems and deal with practical cases.

Intellectual Property Law

**Lecturer:** Associate Professor LV Bingbin

**School:** Law School  **Credit:** 2

**Term:** Fall Semester  **Credit Level:** Undergraduate

This course will mainly deal with the fundamental aspects of intellectual property (IP): patent, copyright and trademark. It will also cover some important emerging issues in IP. The course will provide students with essential knowledge about the theoretical rationales and policy arguments for intellectual property rights. It will explain the basic principles of Intellectual Property Law and the nature and scope of these rights, the procedures for the granting and recognition of the rights, and mechanisms for enforcement as well as defenses against enforcement. This course will enable students to develop a fully rounded understanding of all of the major intellectual property rights, their role in society and the impact of intellectual property on national and global economics and development.

International Economic Law

**Lecturer:** Prof. PENG Yue

**School:** Law School  **Credit:** 2

**Term:** Fall Semester  **Credit Level:** Undergraduate

This course is purporting to lecture on the general theory of International Economic Law. As an introductory seminar, the course will provide students with analytical framework to examine how sovereign countries of the world cooperate at the international level to regulate the globalization of economy. The course will offer a concise but explicit interpretation of International Trade Law, International Investment Law, International Finance Law, and International Taxation Law. The course will also pick up a number of famous cases, for instance, US-Shrimp (WTO DSS8) to explain how the international economic law works.


**Lecturer:** Pro. Dr. ZHANG miao

**School:** Law School  **Credit:** 2

**Term:** Spring Semester  **Credit Level:** Undergraduate

The course examines the 'specific part' of criminal law, especially on the special part of “important” crimes. The course will discuss the elements of “vital” crimes in different chapters; the conceptual framework of criminal types (conduct, responsibility, capacity, punishment). The course would put the emphasis on criminal law’s construction and regulation of (1) interests in property with particular reference to the offences of robbery, theft, fraud, coercion; (2) regulatory offences with special reference to drugs, pornography, judicial orders and environment; (3) crimes against persons, including homicide, sexual offences, non-fatal violence against the person; (4) crimes of bribery, and economic crimes.

Chinese Constitutional Law

**Lecturer:** ZHANG Wei  **Credit:** 2

**School:** Law School

**Term:** Spring Semester  **Credit Level:** Undergraduate

The course will offer a concise but explicit interpretation of China’s Constitution Law. The course is divided into two major parts. First, the study of Chinese constitutional law. From the beginning of the Chinese constitutional history, explain the initial concept contained in the Chinese constitutional norms. Based on the evolution of the text of the Constitution, analyzes the present situation of constitutional system and its implementation by linking the real life cases. The second is the comparative study of Chinese and German constitution. We choose the approximate legal concepts and theories in the Sino-German constitution to carry out specific analysis, mainly related to the principles, the basic rights and the constitutional organs.

Legal English

**Lecturer:** Prof. SUN Wen

**School:** Law School  **Credit:** 2

**Term:** Winter Semester  **Credit Level:** Undergraduate

This course is aimed at introducing various practical skills to students who are interested in Legal English. Considering the huge difference between Chinese legal system and Common Law system, this course focus on comparison between the two legal system by providing comprehensive reading materials and cases for students to read and analyze. To meet the practical needs of law school students for their future career, this course picks up several issues for student discussion, including legal translation methods, legal sources retrieving and legal documents writing. This course will also ask students to debate in groups on legal issues relating to law in order to improve their oral legal English by means of presentation.
The Comparative Constitutional Law

Lecturer: TIAN Fang Credit: 2
School: Law School Term: Fall Semester Credit Level: Undergraduate
The past two decades have witnessed a sharp comparative turn in legal practice and scholarship. Centripetal processes of global convergence, transnational governance, and complex economic interdependence aided by the development of new communication and information technologies have all contributed towards making the legal profession more international in scope than it has ever been before. This new interest is particularly striking in comparative constitutional law and the transnational migration of constitutional ideas. There is no doubt that the systematic study of constitutional law, jurisprudence, and institutions across politics has enjoyed a certain renaissance since the mid-1980s. This course will discuss the methodology of the comparative constitutional law and then will discuss different country’s constitutional system.

International Law

Lecturer: ZHANG Hua Credit: 2
School: Law School
Term: Fall Semester Credit Level: Undergraduate
This course introduces the basic legal concepts, principles and rules governing international relations. Case study is supposed to be the necessary tool all through the term. The landmark cases and the most recent decisions delivered by international courts or tribunals will be examined by way of Questions and Answers. And those core treaties and essential documents concerning international law will also be included.

Comparative Labour & Employment Law

Lecturer: ZHOU Changzheng Credit: 2
School: Law School Term: Spring Semester
Credit Level: 3rd year Undergraduate
This course will explore Chinese labour and employment law with the perspective of globalization and comparative law. First, this course will illustrate the background and main rules on labour contract, wage and working hours, workplace safety and health, organization of trade union, collective bargaining, social insurances, and labour disputes settlement. Secondly, this course will introduce basic legal theories of labour and employment law, including the definition of labour relationship, history of labour and employment legislation, principles and methodology of labour law, etc. Thirdly, this course will discuss the impact of globalization upon Chinese labour and employment law.

Chinese Property Law

Lecturer: Dr. ZHOU Mei Credit: 2
School: Law School
Term: Spring Semester Credit Level: Undergraduate
Property law is a very important and fundamental part of the modern civil law system. However Chinese property law is a very new developing part. Chinese property law course is based on the existing law and the relevant regulations. It mainly consists of three parts: general provisions, also, basic principles; creation, change, transfer and elimination of real right; registration of real properties and protection of real right. The topic of second part is ownership, also, state ownership, collective ownership and private ownership. Different kinds of land use rights will be discussed in the third part. Generally speaking, this course will provide students an basic overview of the existing law frameworks and regulations and the ongoing developing property law system. Also, case study and legal culture comparison methods will be used in this course too.

Economic Law

Lecturer: Associate Prof. LJ Hua
School: Law School Credit: 2
Term: Spring Semester
Credit Level: Undergraduate
This course is purporting to lecture on economic law in China. Economic law is a kind of legal response to economical socialization. It can exists in both planning and market system. It regulates one country’s economy as well as its market. As a core course for legal education in law school of China, Economic law gives a systematic explanation of the basic theories. It focuses on Anti-trust law, law of anti-unfair competition, consumer protection law, product quality law, and advertisement law. The main purpose of this subject is to widen the knowledge scope of students, improve their theoretical level of economic law, and perfect their ability in practice.
**Marine Geology**

**Instructor:** Prof. LIU Shaowen, Prof. YIN Yong  
**Credit:** 2  
**School:** School of Geographic and Oceanographic Sciences  
**Term:** Fall Semester  
**Credit Level:** Undergraduate  
This course will investigate the geology, processes, and paleo-archives hidden beneath the world’s oceans. The course has no formal prerequisites. The course material is necessarily broad, covering ocean floor morphology, plate tectonics, active and passive margins, coastal processes, marine sedimentation, climate interactions, earthquake and tsunami, and gas hydrate. The overall goal of this course is to equip you with a broad understanding of some important aspects of how the Earth works, and to communicate an appreciation for the scale and complexity of many geologic processes. The course is also designed to hone your critical reading and thinking skills, and to provide some basic experience in quantitative problem-solving.

**Process Geomorphology**

**Instructor:** Prof. WANG Xianyan  
**Credit:** 2  
**School:** School of Geographic and Oceanographic Sciences  
**Term:** Fall Semester  
**Credit Level:** Undergraduate  
Process Geomorphology will provide an investigation of the processes that determine the form and evolution of landscapes, starting with tectonic geomorphology and then focusing on hillslopes, rivers, and glaciers and collines. The course will combine lectures, discussions, field data collection, and other activities. This is not a straight lecture class. Active learning and student participation will be an essential.

**Climatic Change: The Scientific Basis – the Climate System**

**Instructor:** Associate Prof. SHI Jiangfeng  
**Credit:** 2  
**School:** School of Geographic and Oceanographic Sciences  
**Term:** Fall Semester  
**Credit Level:** Undergraduate  
Through the study of this course, students can understand the functions of varied components of the Earth system, especially the climate system, i.e., the transfer of energy and materials among them, their interactions, feedbacks, and interrelations. It should be known that climate operates at different time scales with different driving forces playing a dominant role. All of them together influence the climate system which is closely related to human life. From the perspective of the climate system, it will be helpful for students to have an empirical and scientific understanding of the past, current, and future climate change, and acknowledge some research hotpots in depth, such as global warming, recent “hiatus”, and regional climate variability at different time scales.

---

**Introduction to Physical Geography**

**Lecturer:** Prof. LU Huayu  
**Credit:** 1  
**School:** School of Geographic and Oceanographic Sciences  
**Term:** Summer Semester  
**Credit Level:** Undergraduate  
As an introductory seminar, the course will provide an investigation of features and dynamic processes of landform, climate, hydrology, soil and ecology, and in turn, their interaction, and the future trend. The course will combine lectures, discussions, and other activities. The following topic will be included: 1) The status of the physical geography in the earth system science, which is importance in scientific discovery and supports for the society; 2) A case discussion from Tibetan Plateau on the morphological evolution, interlinks of Geomorphological and hydrological processes; 3) Case discussions on mechanism of Climate change, soil and ecological processes, and their interaction.
Principles of Geographic Information Systems

Lecturer: Associate Prof. MA Jingsong
School: School of Geographic and Oceanographic Sciences
Term: Spring Semester
Credit Level: Undergraduate

This course gives students the deep insights of Geographic Information Systems (GIS), from the fundamental theories to the technical details of GIS software. By learning this course, students can not only know what the GIS software will help for geography researches, but also realize how the GIS software really work underneath. When the functions of commonly used GIS software are not available for building complicated models, students can solve the problem by developing new programs using computer programming languages such as C++, Java, and Python. Therefore, students will learn the most important algorithms of GIS and make themselves the specialists of this field.

A Brief Introduction to Human Geography

Lecturers: Prof. ZHANG Jie, Asso Prof. WANG Xia, Dr. ZHANG Hong-Lei, Dr. TANG Shuang-Shuang, Dr. HE Jin-Liao
School: School of Geography and Oceanography
Term: Fall Semester
Credit: 2
Credit Level: Undergraduate

This short course of human geography introduces basic concepts and terminologies as well as knowledge system of the discipline with both hot topics like globalization, urbanization, migration and Chinese mingong (farmer worker), and cyberspace etc. Key theoretical concepts in human geography, such as place, space, territory, region and zoning, scale, uneven development, image and collective memory, location theory, locality, and various type and connotation of landscape will also be introduced in various sub-disciplines of human geography, such as socio-cultural geography; behavior geography; economic geography; geographies of urban, rural and settlement; transportation geography and tourism geographies.

Introduction to Remote Sensing

Lecturer: Associate Prof. ZHAN Wenfeng
School: The School of Geographic and Oceanographic Science
Term: Fall Semester
Credit: 2
Credit Level: Undergraduate

This course aims to introduce the basic concepts, theories, and applications of remote sensing. As an introductory seminar, the course will provide students with the basic concepts of nomenclatures in remote sensing, and the basic theories for optical, thermal infrared, and microwave remote sensing. It will also include overviews of the well-known spaceborne sensors and platforms (i.e., satellites) and their associate features. Knowledge on remote sensing data processing, namely the image acquisition, image correction and enhancement, visual interpretation of images, and image classification (mostly for land use and land cover change (LUCC) purposes), will also be presented. Applications of remote sensing to soils, vegetation, and water bodies, will be of particular interest. Our course may also teach the basic operations of typical remote sensing image processing software such as ENVI.

Land Surface Remote Sensing

Lecturer: Prof. JU Weimin
Credit: 2
School: International Institute for Earth System Sciences
Term: Fall Semester
Credit Level: Undergraduate

This course is offered to undergraduate students in the third and fourth years, who major in physical geography, remote sensing and geographic information system, and other related disciplines. It will cover the basic principles of land surface remote sensing, spectral signatures of land targets, characteristics of different satellite sensors, vegetation indices, and methods for retrieving land surface parameters (leaf area index, clumping index, biomass, forest age, leaf chlorophyll content, light use efficiency, and so on) from remote sensing data, and applications of these parameters to studying land surface processes (mainly terrestrial carbon and water cycles).
**Climate Change**

**Lecturer:** Prof. LIU Jingxian

**School:** School of Atmospheric Science  
**Credit:** 2  
**Term:** Spring Semester  
**Credit Level:** Undergraduate

Climate change is one of the major challenges the human beings face today. This course is open to senior undergraduates, graduates, and foreign students, in earth science and other disciplines. It covers basic concepts and related issues about climate change, including greenhouse gases, the greenhouse effect, carbon cycle, climate change analyses from data and model simulations, the impacts of climate change, and climate change adaptation. This course is taught fully in English. Through this course, the students will gain an extensive understanding of this important issue with enhanced English comprehension.

**Hydrometeorology**

**Instructor:** Prof. YUAN Huiling  
**School:** School of Atmospheric Sciences  
**Credits:** 2  
**Semester:** Spring semester  
**Credit Level:** Undergraduate

This course introduces fundamental concepts in the study of the water cycle. The focus is on the land-surface and atmospheric branches of the water cycle. Course lessons will cover the theory and modeling of hydrologic processes, as well as measurement techniques for components of the water cycle. This content includes the scope and basic concepts on the global water cycle, global-scale hydroclimatic movement, energy and radiation budget near the surface, precipitation and evaporation processes, surface water and groundwater processes, hydrometeorological forecasting and hydrologic models, and hydrometeorological cycle and global change.

**How to Build a Habitable Planet**

**Lecturer:** Prof. HUI Hejiu  
**Credit:** 2  
**School:** School of Earth Sciences and Engineering  
**Term:** Fall Semester  
**Credit Level:** Undergraduate

There are three aims of this course for students. The first is to understand the story of Earth and be able to tell it, by learning the scientific evidence and rational induction that leads to the story. The students will gradually learn what we know, how we know, and how well we know about the story. The second is to see how human beings get involved in the planetary evolution. The course will show how the activities of human beings impact the planet and tell the students how our planet is impacted by these man-made impacts compared to geologic events. The last part of this course will lead the students to think whether there is other intelligent life in the universe. The students will be able to understand the implications of other life in our galaxy.

**Minerals and Human Health**

**Lecturer:** A. Prof. CHEN Yang  
**Credit:** 2  
**School:** School of Earth Sciences and Engineering  
**Term:** Spring Semester Level:  
**Credit Level:** Undergraduate

This course is purporting to lecture on the role of minerals in human life and industrial activities. The topics cover the issues associated with the physical and geological processes of the Earth, the sustainability and fragility of the Earth’s resources, and the interplay between health, industrial activities, and environments. The course will discuss the impact of minerals on human health, the role of minerals in modern technologies, asbestos and silica problems, occupational diseases caused by inhalation of mineral dust, and environmental protection. The course will help students to understand the Earth’s activities and the unique resources that sustain life and facilitate industrial progress.

**Soil and Water Interface Chemistry**

**Lecturer:** Prof. GU Cheng and Prof. QU Xiaolei  
**Credit:** 2  
**School:** School of the Environment  
**Term:** Fall Semester  
**Credit Level:** Undergraduate

This course covers the interfacial phenomena and principles of major physical chemical processes in the soil system as well as engineered water treatment systems. The first part of this course introduces major components in soils and how contaminants partition and react on the interfaces of these components. The second part of this course introduces major technologies that use interfacial phenomena for water quality control. The lectures cover concepts, principles, applications, and limitations of these technologies. Students will learn how each water quality parameter affects and is affected by the treatment processes in the qualitative and quantitative manner.
Environmental Policy Analysis

Lecturer: Assoc. Prof. LIU Beibei
School: School of the Environment
Credit: 2
Term: Spring Semester Credit Level: Undergraduate
This course is to help those undergraduates, who have completed the introductory courses in economics and environmental science, to build up the basic understanding of energy, environmental and natural resource policies. In this course, we discuss the necessity of environmental and natural resource policy within the framework of economics and sustainable development, convey the concepts and methods of valuing the environment, explain the main categories of policy instruments used for environmental management as well as how each instrument works. And, we apply the framework of cost and benefit analysis (CBA) to evaluate classic and up-to-date environmental policies in both developed and developing countries.

Global Change and Environment

Lecturer: Prof. WANG Haikun
School: School of Environment Credit: 2
Term: Winter Semester Credit Level: Undergraduate
Comprehensive abilities of systematic analysis are necessary to address issues of environmental problems, such as global climate change and air pollution. In addition to basic theory and scientific frontier in global environmental change, we will discuss a number of socio-economic factors that contribute to these issues, and use them to gain insight into specific environmental problems. After completing this course students are expected to be able to: 1) explain the scientific basis of the global environmental issues and the technical options available for avoiding or contending with these issues; 2) discuss the social, economic and political factors surrounding the global environmental issues covered in class.

Ecological Safety & Environmental Risk of Chemicals

Lecturer: Dr. ZHONG Huan, Dr. ZHANG Xiaowei
School: School of Environment Credit: 2
Term: Fall Semester
Credit Level: Undergraduate
There are growing concerns about safety of chemicals, which are highly related to environmental pollution and food safety. This course is aiming at introducing the basic theories of ecotoxicology, based on which we could understand the food safety issues. Our main objective is to help you answer the questions, like (1) Is our food safe? (2) How to understand the headline-grabbing food safety news appeared in the social media every day? Are they trying to cheat you? (3) How to solve the food safety problems? How you could help yourself and your friends and parents?

Consumer Behavior

Lecturer: Associate Professor WEN Nainan Credit: 2
School: School of Journalism and Communication
Term: Spring Semester
Credit Level: Undergraduate
This course provides an examination of the psychological and sociological factors affecting consumers’ buying behavior. More specifically, students will learn about various external and internal influences affecting the field of consumer behavior. Such influences include cross-cultural variations, subcultural impacts, perception, learning, motivation, attitude, and self-concept, among others.
**Accounting Measurement and Disclosure**

**Lecturer:** XUE Qingmei  
**Credit:** 4  
**School:** Business School  
**Term:** Fall Semester  
**Credit Level:** Undergraduate

The objective of the course is to develop a framework for thinking about transaction/event measurement and disclosure that needs to be practiced by business entities. The course will begin by learning about a measurement or disclosure issue outside of an accounting context, and then will discuss the accounting implications for the measurement issue. Students will not only learn the nuts and bolts of accounting, but also build an intuition for measurement that allows students to evaluate current measures and develop measures that are both relevant and reliable to decision makers. The course will use a series of cases and two projects to facilitate self-discovery of knowledge and development of a variety of professional skills and attitudes.

**Introduction to Financial Accounting**

**Lecturer:** XUE Qingmei  
**Term:** Fall Semester  
**Credit Level:** Undergraduate  
**Credit:** 2

This course is designed to provide students with a basic understanding of financial accounting. Specific attention will be devoted to the preparation, analysis, and interpretation of financial information and financial statements. The course will focus on the four financial statements used by external stakeholders for decision making purposes. In this course, students should gain a thorough understanding of the items in these financial statements and also the economic events and related accounting decisions underlying them. By the end of the course, students should feel comfortable with reading a company’s annual report and be able to make comparisons with other firms across different time periods.

**Operations Management**

**Lecturer:** Professor XU Xiaolin  
**Credit:** 2  
**School:** Business School  
**Class:** Undergraduate  
**Term:** Spring Semester

Operations Management is defined as the design, operation, estimation and improvement of the systems that create and deliver the firm’s primary products and service. For a particular firm, there are three basic functions: marketing, operations and financing. While marketing is responsible for selling the products and financing is regarding how to obtain the necessary resources (debt vs. equity), operations is about how to make the products or provide the service to customers in an efficient and effective way. Our objective in this course is to introduce relevant concepts, techniques and methods. In particular, some of the topics covered include: operations strategy, supply chain coordination, inventory management, business process reengineering, mass customization, and waiting line management etc.

**Risk Management and Internal Control**

**Lecturer:** ZHANG Juan  
**Credit:** 3  
**School:** Business School  
**Term:** Fall Semester  
**Credit Level:** Undergraduate

This course deals with the design, implementation and use of control systems to manage risks and achieve organization objectives. Based on the COSO Internal Control Framework and Chinese Internal Control Regulations, the exploration will consider four broad areas: frameworks for thinking about control systems, risk in an organization, organizational design, business cycles and accounting control process. During the term you will extensively analyze and discuss cases involving real organizations. Case-based, experiential learning emphasizes and develops important discovery skills that professional accountants must develop, such as curiosity, problem identification, information search, evidence evaluation and, finally, effectively communicating an understanding.

**Retail Marketing**

**Lecturer:** WU Yizhen  
**Credit:** 2  
**School:** Business School  
**Term:** Fall Semester  
**Credit Level:** Undergraduate

This course is purporting to lecture on retail management. In the introductory seminar, the course will provide students with retail trends and basic retail institutions. Retail Strategy will be one of the core contents for students to understand retail industry competition as well as retail innovation. The execution part of retail strategy will also be delivered to the students. The execution functions such as trade area analysis, site selection, store decoration and layout, merchandising, pricing as well as promotion will be discussed one by one. Some case study will be in the course to help understanding the course contents.

**Data Science for Business**

**Lecturer:** Dr. XU Kaiqian  
**Credit:** 2  
**School:** School of Business  
**Term:** Spring Semester  
**Credit Level:** Undergraduate

The data-driven decision is becoming more and more important in Business, and Data Science is considered as the sexiest career of twenty-first century. The objective of this course is to introduce the basic knowledge and skills of being as business data analyst. The course includes: 1) Basic Knowledge: general process of data analysis, such as finding the right data source, adopting appropriate methods, and demonstrating the results effectively. 2) Basic Techniques: mass data management (including SQL and NoSQL data solutions), mass data mining algorithms, and basic statistical modeling techniques. 3) Data analysis team management: attracting, building and nurturing the data science team, managing data analysis projects and etc.
Employees' Emotional Intelligence and Emotional Management

**Lecturer:** Professor MAO Yina  **Credit:** 2

**School:** School of business

**Term:** Fall Semester  **Credit Level:** Undergraduate

Through the indepth investigation of the essence and physiological basis of emotions, this course intends to discuss the relationships between emotions and employee personality as well as organizational culture. Two perspectives (i.e., employees’ emotional intelligence development and organizations’ emotional management) will be adopted to help students to not only understand their own emotions and emotional management, but also understand the employee development and organizational management in business workplaces. Research frontiers of emotions area will be incorporated into this course as well. This course aims to enrich students' management knowledge, cultivate their capability in knowledge application and teamwork, as well as broaden their international view.

Investment Appraisal

**Lecturer:** Dr. & Associate Professor LI Xiaorong  **Credit:** 2

**School:** School of Economics

**Term:** Spring Semester  **Credit Level:** Undergraduate

Investment Appraisal is a systematic framework for economic evaluation of proposed projects from different perspectives. This course intends to apply the knowledge and technique to the real issue, which concerns corporate or institution investment decision making, particularly the evaluation of long-term capital expenditure decisions. It focuses largely on introducing and analyzing the appraisal techniques tools rather than developing new theories. At the end of the course, the students are expected to understand the popular methodologies of investment appraisal given different decision maker’s objective functions, and improve the ability of applying knowledge and techniques that result in a successful investment assessment.

Fixed Income Securities

**Lecturer:** Dr. YANG Nian  **Credit:** 3

**School:** School of Economics

**Term:** Spring Semester  **Credit Level:** Undergraduate

The aim of this course is to provide an introduction to basic concepts of fixed income securities, the valuation of fixed income securities, and the management of fixed income investment portfolios. This course covers the following topics: (a) the price of a bond, measuring yield and risk, bond risk management; (b) different sectors of bond market, various securities traded in the market; (c) bond derivatives; forward contracts, futures, swaps; (d) bond derivatives: bond options and embedded options, valuation methods.

The Frontier of International Trade Theory and Policy

**Lecturer:** Prof. TAN Yong  **Credit:** 2

**School:** Business School

**Term:** Spring Semester  **Credit Level:** Undergraduate

This course will be taught by Tan Yong. This course is in two parts. The first part studies the reasons countries trade with one another and the factors that determine how the gains from trade with one another and the factors that determine how the gains from trade are distributed across three fundamental ideas: comparative advantage, economies of scale, and imperfect competition. Each of these ideas will be developed in detail in order to shed light on the actual global patterns of trade. The second part of the course will be presentation of students. I will assign papers related to international trade to each group, and each group needs to summarize the paper and point out its contributions, merits and drawbacks. In addition, the presentation is anticipated to guide the class discussions.

Decision Making for Accountancy

**Lecturer:** Prof. LI Xiang  **Credit:** 3

**School:** School of Business

**Term:** Spring Semester  **Credit Level:** Undergraduate

This course develops an understanding of the link between organizational mission and governance structures and accounting’s role in coordinating, controlling and managing organizations. By the end of the course you should have gained an understanding of how accounting is influenced by and influences organizational mission, strategy, structure, and the resulting performance measurement and control systems. To help in the development of this understanding, we'll discuss numerous examples of decision situations (often using cases), both hypothetical and real.

International Accounting

**Lecturer:** Prof. LV Wei  **Credit:** 2

**School:** Business School

**Term:** Spring Semester  **Credit Level:** Undergraduate

As a basic professional course for accounting students, this course aims at training students thinking and innovation, improving the theoretical quality and practical ability. This course is designed to enable students to understand the accounting policies and the operation of relevant regulatory bodies in the United States to understand the basic situation of the accounting profession, and to provide students with a unique perspective on China's accounting industry supervision. At the same time, the curriculum encourages students to develop innovative skills, express and articulate their views and opinions on the issues.
zero to one: build the future through innovation and entrepreneurship

Lecturer: HUO Dong (Ph.D.)
Credit: 2
School: School of Business
Term: Spring Semester Credit Level: Undergraduate
China is experiencing its transition from a traditional economy of “world factory” to an emerging economy of “world innovation center.” Innovation and entrepreneurship are inevitable in such a transition. This course aims to inspire students’ innovativeness and encourage them to get into entrepreneurial practices. Primarily designed for upper-level undergraduate students. This course teaches basic concepts and skills in innovation and entrepreneurship. In addition, case studies are introduced to discuss real entrepreneurial business situations. Topics include the entrepreneurial perspective, startup strategies, business idea evaluation, marketing, entrepreneurial finance, and business plan writing. This course prepares creative, technical and business minded students for careers focused on entrepreneurship, intrapreneurship, creative industries, and high technology.

Intermediate Econometrics

Lecturer: Prof. YANG Liu Credit: 2
School: School of Economics
Term: Spring Semester Credit Level: Undergraduate
This course covers the econometric devices needed to understand empirical economic research and to conduct independent research projects. Topics include reviews on probability and statistical theory, ordinary least squares, generalized least squares, instrumental variables, simultaneous equations models, panel datamodels and discrete choice models. Students are required to implement all econometric models on the open platform R. This course would be appropriate for a student who has a basic knowledge on matrix algebra, probability theory at the undergraduate level.

Managerial Communication

Lecturer: Prof. SHI Lifang
Credit: 2
School: School of Business
Term: Winter Semester
Credit Level: Undergraduate
This course is designed to equip the undergraduates with the preliminary knowledge of communications in managerial settings. The primary goals of this course are also to help students become more sensitive to intercultural communication differences, thereby to improve their intercultural business communication skills necessary in the global workplace with the knowledge and skills they learned from class. Students will study and discuss communication theory and business cases in order to analyze and understand the strategic and managerial choices in communicating with others both within and outside the businesses. Students will apply these strategies throughout the course in written, oral presentations and role play in various situations.

Financial Risk Management

Instructor: LIU Desu Credits: 3 School: School of Business
Term: Fall semester Credit Level: Undergraduate
This course deals with the ways in which risks are quantified and managed by financial institutions. The topics that will be covered include the nature of financial institutions and their regulation, market risk, credit risk, operational risk, liquidity risk, and the credit crisis of 2007. The course is a core course for undergraduate students specializing in financial engineering and an elective course for those who are interested in risk management or financial institutions. It is not necessary for students to take a course on options and futures markets prior to taking this course. But if they have taken such a course, some of the material in the first eight chapters does not need to be covered.

Strategic Human Resource Management in New Ventures

Lecturer: Prof. JIANG Chunyan
School: Business School
Credit: 2
Term: Spring Semester
Credit Level: Undergraduate
This course deals with strategic human resource management of new ventures. The perspective adopted is that of an entrepreneur who is responsible for the overall success of the firm. Since the job of entrepreneurs cuts across all the functional areas (e.g., finance, marketing, human resource management, and accounting), this course builds on your previous business course works. The general goals of the course are: (1) to develop a basic understanding of the conceptual and theoretical foundation of the field of strategic management; (2) to develop skills in applying these concepts in new ventures contexts.

Global Human Resource Management

Lecturers: Professor ZHAO Shuming & Associate Professor CHEN Zhihong
Schools: School of Business, Institute for International Students
Term: Spring Semester
Credit: 2
Credit Level: Undergraduate
This course provides insights to the developing trend of human resource management in the context of globalization, summarizes various formats of global human resource management, explores into the global human resource management system and the functions of global human resource management. A systematic introduction to relative theories and practices of global human resource management can be accessed in this course. Students can have the competence to deal with common business and personal business in human resource management with the basic principles and methods obtained in this course. Also, students can be facilitated with strong abilities in verbal and non-verbal communicating, organizing and coordinating.
Global Culture

School of Foreign Studies

- Selected Readings in Nineteenth Century Russian Literature -- Wang Jiaxing
- Brief History of Korean Literature (II) -- Zheng Shanmo
- British Society and Culture -- Yang Jincui
- American Society and Culture -- Jiang Ningkang
- Heritage of German Thought -- Kong Deming
- French History and Culture -- Cao Danhong
- Introduction to Literature -- Cao Lei
- Introduction to Japanese Culture -- ZHAO Zhongming

Department of Philosophy

- Classical Chinese Philosophy: An Analytic Approach -- Hu Xingming

School of Architecture and Urban Planning

- Architecture of Nuance: The Technology of Humanism in Architecture -- Dou Pingping

British Society and Culture

**Instructor:** Prof. YANG Jincui  
**Credit:** 2  
**School:** School of Foreign Studies  
**Term:** Fall Semester  
**Credit Level:** Undergraduate

This course provides a venue enabling a more systematic and ultimately more satisfying way to explore Britain. Students will be encouraged to read about British history, its evolution, its dynamics, and its key aspects of society. The general goals for the course are for students to explore the evolution of British society and its key institutions across the ages. It is hoped that this will be not only an educational but also an enjoyable series of activities, focusing on key institutions and social systems such as the individual, group, family and organization. Upon successful completion of this course, it is expected that each student will be able to describe key aspects of British society, including the land and people, the social system, politics and government, civil society, the economy, culture and lifestyle, and even more Britain in relation to the world.

American Society and Culture

**Lecturer:** Prof. JIANG Ningkang  
**Credit:** 2  
**School:** School of Foreign Studies  
**Term:** Spring Semester  
**Credit Level:** Undergraduate

This course is aimed at providing students with basic knowledge of American society and culture in a form of class instruction. The main body of the course consists of five parts: American society, history, culture, politics, and economy, requiring students to participate actively in class discussions and presentations. The course requirements contain a regular presentation given by each student, a mid-term examination in class, and a course paper by the end of semester. Usually, a student’s in-class performance is very important in calculating his/her final scores while a mid-term exam and a final paper cannot be dealt with carelessly. It is necessary to inform each student that daily attendance in class is crucially important and any casual absence will significantly undermine his/her record of performance.

Selected Readings of 19th Century Russian Literature

**Lecturer:** Prof. WANG JiaXing  
**Credit:** 2  
**School:** School of Foreign Studies  
**Term:** Spring Semester  
**Credit Level:** Undergraduate

Russian literature of the 19th century plays an important role in Russian culture. This course is purporting to familiarize students with the basic content of 19th Century Russian Literature, and to develop the sensation of the richness and liveliness of Russian language through reading literary works, which contain all sorts of linguistic phenomena. The course will focus on giving proper guidance to students in understanding Russian literature, the perceptions of the main contents of literary works and objective presentations of their ideological and aesthetic values.

Brief History of Korean Literature I

**Lecturer:** Prof. ZHENG Shanmo  
**Credit:** 2  
**School:** School of Foreign Studies  
**Term:** Spring Semester  
**Credit Level:** Undergraduate

As an introductory seminar, the course will provide students with developing process of Korean literature from ancient to modern period. The course will lecture on historical process of Korean literature, as well as introduce important Korean writers and works. The course will mainly focus on communication between Chinese and Korean literature, such as how the Chinese literature spread in Korea, and how it influenced Korean literature in history. It aims to let students find out the internal developing path of Korean literature by themselves, and broaden the vision of literature studies methods and theory.
Heritage of German Thought
Lecturer: KONG Deming and QIN Wen
Credit: 2
School: School of Foreign Languages
Term: 1&2 Credit Level: Undergraduate
This course provides an opportunity for the students to broaden their experience of literature by tackling literary works, and dealing with themes that are vital in understanding the European culture and history, including politics, philosophy, language evolution, religion and arts, etc. The period ranges from the reformation to the present modern world. Reading materials are based on individual author or on texts grouped by genre or theme. The students will be encouraged to place each text in wider intellectual and historical context and interpret the text on their own. The critical and theoretical tools taught during the course by textual analysis will also enable the students to undertake in-depth study of specific aspects of Western literary works. Teaching forms include but not limited to in-class debate, presentation, Q&A session and group discussion. Students’ full participation is encouraged.

French History and Culture
Lecturer: CAO Danhong, associate professor Credit: 2
School: School of Foreign Studies
Term: Spring Semester Credit Level: Undergraduate
“French History and Culture” is a course given to junior students of the French Department. France has a long history during which significant events have taken place that have profoundly influenced French history and culture and contributed to the formation of a French “identity”. This course will focus on studying some decisive moments in this long history and their influence, explaining the French identity and the understanding of French society and culture today. This course aims to enrich students’ knowledge of French history and culture, to broaden their vision, to increase their ability to analyze cultural phenomena within a broader framework that takes into account at the same time the historical, cultural, social, linguistic elements, etc.

Introduction to Literature
Lecturer: Associate Prof. XU Lei (PhD in English Literature)
Associate Prof. Dan Hansong (PhD in English Literature)
School: Foreign Studies School Credit: 2
Term: Fall Semester Credit Level: undergraduate
By acquainting students with the foundational knowledge about western literature, including its development, basic genres and elements, methods of appreciation through intensive reading of selected literary texts, this course is intended to enhance students’ sensitivity to the English language in a literary context and to motivate them to develop a critical mind to notions and facts in literature. A literary map will be drawn across genres and historical periods, covering a wide range of authors such as D. H. Lawrence, James Joyce, Ernest Hemingsway, Sherwood Anderson, Margaret Atwood, William Shakespeare, William Blake, Alfred Tennyson. Through lectures, classroom discussions and workshops, students are taken on a guided tour to find out what makes literature as such.

Introduction to Japanese Culture
Lecturer: Associate prof. ZHAO Zhongming
Lecturer ZHUANG Qian
School: School of Foreign Languages
Term: Fall Semester Credit: 4
Credit Level: Undergraduate
This course is designed to guide students to explore Japanese culture from multi-aspects, such as politics, society, religion, diplomacy, literature and art. The teaching methods include classroom lecture, subject lecture, discussion and presentation. Classroom lecture will introduce the theories and methodologies to students specifically for researching Japanese culture. Subject lecture will focus on the key issues and typical cases of Japanese culture, guiding students to raise the awareness about problems and develop critical thinking skills. Discussion will acquaint students with group research while using methods learned from classroom lecture and subject lecture. Finally, presentation will promote knowledge internalization and language performance.
Architecture of Nuance: The Technology of Humanism in Architecture

Lecturer: Associate Prof. DOU Pingping  
Credit: 2

School: School of Architecture and Urban Planning   
Term: Spring Semester

Credit Level: Undergraduate

From the humanistic perspective, this course elaborates the technological endeavors in fulfilling the multifaced and nuanced architectural demands. It takes shape in a combination of themed lectures and seminars, following the structure – the Tradition and Pioneers; the Alternatives of Modern Architecture; Understanding Phenomenological Environment; and Towards Digital Urbanism. The discourse and heritage at the Cambridge School of Architecture form the underpinning thread. The course introduces a series of prominent architects and scholars through richly illustrated case studies and interpretations. The course also nurtures the students to develop a critical understanding of the role of technology playing in the discipline of architecture.

Introduction to Biomedical Engineering

Lecturer: Prof. RUAN Gang  
Credit: 3

School: College of Engineering and Applied Sciences   
Term: Fall Semester

Credit Level: Undergraduate

Biomedical engineering applies the principles of physical sciences and engineering to solve biomedical problems, either to tackle diseases or to understand how biological systems work. This course introduces the basic concepts and major fields of biomedical engineering. The objectives of the course include helping the students to gain basic knowledge of the discipline of biomedical engineering, to develop interests on biomedical engineering, and to gain basic knowledge on translation of new technologies to the clinic and market. The instructor of this course is a professor at Nanjing University, China and an adjunct professor at the Ohio State University, USA. He has published a number of high impact papers, and has successfully co-founded an innovation-based company in the US.

Biochemistry

Lecturer: Prof. YU Hanyang  
Credit: 4

School: College of Engineering and Applied Sciences   
Term: Spring Semester

Credit Level: Undergraduate

Biochemistry aims to understand how in animate molecules such as proteins and nucleic acids interact to maintain and perpetuate life, and attempts to explain the unifying principle behind the vast diversity of life forms. By taking this course, students would not only see what different biological molecules look like, but also understand how they are involved in various biological processes. Aside from basic biochemistry knowledge, selecting hot topics such as genetically modified organisms and cancer immunotherapy, as well as other common health- and food-related concerns would also be discussed. The philosophy of this course is to intrigue students by relating complex biochemical processes to common phenomena seen in everyday life.
Problem Based Learning
Lecturer: Prof. WANG Yiqing Credit: 3
School: College of Engineering and Applied Sciences
Term: Fall Semester
Credit Level: Undergraduate
Problem Based learning is to help undergraduate student build knowledge on taking leadership roles in the biomedical engineering industry. In this course, we are developing new models of learning and students are required to utilize their analytic and synthetic skills to solve multi disciplinary engineering problem.

Fundamental Science Aspects for Applied Science and Social Science Students
Lecturer: Dr. Sascha Vogehe Credit: 2
School: College of Engineering and Applied Sciences
Term: Spring Semester
Credit Level: Undergraduate
A multipurpose course teaching fundamental and therefore critical approach focused on “understanding”; some of the most controversial aspects at the cutting edge of postmodern science are understood in scientifically correct ways in spite of being “philosophical”, rendering it useful for efficient application of the scientific method at any level while equations never exceed high school geometry (Pythagoras). Memetic and fundamental introduction of formalisms ensures retention and actual application of e.g. error statistics. Considerations of symmetries and fundamental arguments replace formal sophistry, facilitating interdisciplinary communication and collaboration and a rounded, satisfying intellectual perspective; limits of science are important, including those of science as a social construct. Physics students can usually calculate the age difference in the relativistic twin paradox, but cannot defend the result properly. You will be able to graphically explain why one twin is younger without such allowing time travel. Examples also come from nanotechnology materials science etc.

Molecular Biology
Lecturer: Prof. LI Zhe Credit: 2
School: College of engineering and applied sciences
Term: Spring Semester
Credit Level: Undergraduate
Molecular biology concerns the molecular basis of various biological activities inside a cell, including the biosynthesis, properties and functions of three different types of biomacromolecules -- DNA, RNA and protein, and studies the molecular regulation mechanism of these biological processes. This course emphasizes on understanding of cellular processes involved in the organization and expression of genetics information, including systematic introduction to macromolecular structures, DNA replication, RNA transcription, protein synthesis and transport, principle of gene expression and regulation, and other basic concepts in molecular biology. The course also covers the relevant scientific history and the recent progress in molecular biology research, helping the students develop an overall understanding of molecular biology.

Research Updates on New Therapeutics and Drug Delivery Systems
Lecturer: Prof. DING Zhi Credit: 2
School: School of Life Sciences
Term: Spring Semester Credit Level: Undergraduate
These contents are introduced through selected literature and news reports on current research interests; partially through talks of the lecturer, PowerPoint, video materials and on site discussions; partially through a reverted mode by presentations of the participants. The following topics will be covered: gene therapy and transfection agents, novel drug delivery devices, immunology and prophylactic vaccines, tumor immunotherapy and therapeutic vaccines, New antibiotics, New therapeutic strategies for diabetes, fighting cancer with bacteria, stem cell, tissue engineering and artificial organs, artificial skin development and transdermal drug delivery.

Introduction to Pharmacy
Lecturer: Associate Prof. XU Chen Credit: 2
School: School of Life Sciences
Term: Spring Semester
Credit Level: Undergraduate
The major focus of the course is to develop a comprehensive introduction to contemporary pharmaceutical science, covering its history, development, scope of discipline, fundamental concepts, research branch and methods, main achievements, cutting-edge technology, contemporary issues, career opportunities, and prospects for the future. Through this course, students will get a better understanding of the latest developments of pharmaceutical science as an interdisciplinary subject closely related to life sciences and chemistry. Also, the course will provide an exposure to the role of the pharmacist in contemporary healthcare and career opportunities in the field.

Ecosystem Ecology
Lecturer: Associate Prof. ZHOU Changfang Credit: 2
School: School of Life Sciences
Term: Fall Semester
Credit Level: Undergraduate, graduate
This course is open for those students who are interested in natural science and keen on understanding the principles of ecosystems and their functioning. The course will start with definition of ecosystem, its main components, function and services. Then typical natural ecosystems, such as forests, grasslands, deserts, rivers and lakes, estuaries, saltmarshes and marine, will be introduced. If time permitted, artificial ecosystems like botanical gardens and agriculture ecosystems will be also enrolled. In the class, students will be able to find out the keynote environment issues that decide the integrated structure of the eco system, uncover its typical biomes, dominated plants, animals, and microorganisms (here we nominate as producer, consumer and decomposer, respectively), and then understand the dynamics of ecosystem functioning.
Applied Time Series

**Lecturer:** Assistant Professor LIU Fan  
**Credit:** 2
**School:** School of Management & Engineering  
**Term:** Spring Semester  
**Credit Level:** Undergraduate  

Many of the business systems are dynamic systems in which their states change over time. This course introduces time series models and associated methods of data analysis and inference. Topics include ARIMA processes, stationary and non-stationary processes, exponential smoothing methods, seasonal processes, identification of the models, estimation of parameters, diagnostic checking of fitted models, forecasting, and spectral analysis. Real-world applications for understanding characteristics of time series data in economics, finance, management and industries, and modelling and evaluating forecasts upon which decision-making would depend are emphasized with lab on using R.

Operations Management

**Lecturer:** Prof. SHEN Houcai  
**Credit:** 3  
**School:** School of Management and Engineering  
**Term:** Spring Semester  
**Credit Level:** Undergraduate  

Operations Management is the management of business activities directed related to the creation and delivery of goods and services for Target customers. It is one of the central functions of every business, profit and non-profit organization alike. This course focuses on basic managerial issues arising in the operations of both manufacturing and service industries. The objectives of the course are to familiarize students with the problems and issues confronting operations managers and to introduce language, conceptual models, and analytical techniques that are broadly applicable in confronting such problems. The spectrum of different process types used to provide goods and services is developed and then examined through methods of process analysis and design.

Stochastic Processes

**Lecturer:** Associate Prof. QU Hui  
**Credit:** 2  
**School:** School of Management and Engineering  
**Term:** Fall Semester  
**Credit Level:** Undergraduate  

This is an introductory course on stochastic processes. After a brief review of basic probability theory, this course will first give a general introduction on stochastic processes and then cover the following important processes: Discrete-time Markov Chains, Poisson Processes, Continuous-time Markov Chains and Brownian Motions. Plenty of practical problems will be discussed besides the theoretical parts. By the end of this course, students should have a good understanding of basic theories and methods of stochastic processes, master common stochastic processes models, and be able to use stochastic processes to model and analyze some real world phenomenon.
Design and Analysis of Algorithms

Lecturer: Dr. HU Qian and Prof. LIM Andrew
Credit: 3
School: School of Management and Engineering
Term: Spring Semester
Credit Level: Undergraduate

It is an intermediate algorithms course with an emphasis on teaching techniques for the design and analysis of efficient algorithms, emphasizing methods of application. The course emphasizes the relationship between algorithms and programming, and introduces basic performance measures and analysis techniques for computational problems. It will concentrate on developing implementations, understanding their performance characteristics, and estimating their potential effectiveness in applications. Topics in the course include divide-and-conquer, randomization, dynamic programming, greedy algorithms, graph algorithms, heuristics, and complexity. It provides a solid background in algorithms for students, in preparation either for a job in industry or for more advanced courses at the graduate level.

Topics in Quantum Information Science

Lecturer: Prof. WU Shengjun
Credit: 3
School: KuangYaming Honors School
Term: Spring semester

This is a 3-credit course given by the KuangYaming Honors School, most of the lectures will be given by Prof. WU Shengjun, and a few invited lectures will be given by guest professors. We will cover the basic topics in quantum information science. The level is appropriate for undergraduates and beginning graduate students. Students are supposed to know calculus and linear algebra, while knowledge of quantum mechanics is not a prerequisite for this course. We shall cover the basic concepts of quantum mechanics in the first two weeks (graduate students can skip these two meetings without any problem), and then move to topics in quantum information. The final grade of a student is based on his/her attendance and a final term paper or presentation on a topic of his/her choice, subject to approval by the instructor.

Introduction to Molecular Simulations of Complex Systems

Lecturer: Assoc. Prof. HU Jinglei
Credit: 3
School: KuangYaming Honors School
Term: Spring Semester
Credit Level: Undergraduate

This course consists of topical lectures which provide introductory descriptions of basic concepts in complex systems (also referred to as soft matter systems) and focus on how molecular simulations are applied to such systems. In each lecture, there will be a case study where the students shall use the offered computer program to run simulations and do data analysis in-class. Two types of molecular simulation techniques, i.e., Monte Carlo and Molecular Dynamics will be explained in details. This course is open to all interested undergraduate and graduate students. Prerequisite knowledge of complex systems and computer programming is not necessary.

Advances in Electronic Devices

Lecturer: Prof. LI Yun, Prof. LI Jun
Credit: 2
School: School of Electronic Science and Engineering
Term: Fall Semester
Credit Level: Undergraduate

The central aim of this course is to assist the students to access the most advanced development of electronic devices, to understand the scientific research topic on this school, and to light the interest on researches for the students as well. Based on the majors of this school, our topics will be introduced as two parts: 1) To access the most advanced fabrication and characterization methods for electronic devices; 2) To understand the definition, mechanism, and applications of the electronic devices, including the organic, carbon-based, functional, and super conducting electronic devices, and soon on.

Laser Physics and Applications

Lecturer: Prof. TURCU Edmond, Prof. WANG Fengjiu
School: School of Electronic Science and Engineering
Term: Spring Semester
Credit: 2
Credit Level: Undergraduate

This course aims to provide students with a solid understanding of the basic principles of lasers and their modern day applications and prepare them for using this ever expanding technology in industry or research activities. The contents will help students develop both theoretical and experimental expertise in the field of optics, ultrafast science and material physics. No prerequisite is necessary, although an interest in physics would be preferred. Please refer to Prof Fengjiu Wang’s research page to learn more about how lasers can help us gain fundamental knowledge about emerging materials and help advance the capabilities of nanoscale functional devices.
http://ese.nju.edu.cn/photronics/index.html
An Introduction to X-ray Astronomy

**Lecturer:** Prof. LI Zhiyuan  **Credit:** 2  
**School:** School of Astronomy and Space Science  
**Term:** Spring Semester  
**Credit Level:** 3rd and 4th year undergraduate  

As one of the main branches of modern astronomy, X-ray astronomy studies most, if not all, classes of celestial objects in the hierarchical Universe, ranging from planets, stars, galaxies and their central massive black holes, and the intergalactic medium. This lecture serves as a general introduction to X-ray astronomy, covering research frontiers of related astronomical phenomena, physical processes, as well as instrumentation. Background knowledge on general astronomy and college physics will be useful but not required.

Active Galactic Nuclei

**Lecturer:** Prof. LUO Bin  **Credit:** 2  
**School:** School of Astronomy and Space Science  
**Term:** Spring Semester  
**Credit Level:** Undergraduate and graduate  

This course gives a general overview of the physics and cosmological evolution of Active Galactic Nuclei (AGNs) and their central super massive black holes (SMBHs). With the advent of recent multiwavelength observatories, the field of AGNs is leaping forward, and it becomes a major component of extragalactic research and a frontier of modern astronomy. The content of this course includes multiwavelength observational picture of AGNs, physics of SMBHs and accretion onto SMBHs, radiation processes of accretion disks, physical processes in AGN gas and dust, AGN types and unification, main components of AGNs, AGN host galaxies and environments, formation and cosmological evolution of AGNs, outstanding questions in AGN research. Some new AGN results based on recent X-ray observations (e.g., Chandra, XMM-Newton) and numerical simulations will be included.

Computational Photonics

**Lecturer:** Prof. Marek Wartak, Prof. WU Xiaoshan, Prof. WU Zongsen and Prof. WEI Li  
**School:** School of Physics  **Credit:** 2  
**Term:** Fall (part I) and Spring (part II)  

The course of “Computational photonics” is a complete new curriculum emerged in the recent years around the world. This course analyzes and discusses how to generate, propagate, amplify and detect light signals in optical waveguides and fibers or even metamaterials. Photonics involves with coherent, monochromatic and collimated lights, while Computational Photonics makes all physical concepts easier to understand by using Matlab codes. In 2016, United States detected successfully gravitational waves and our nation launched a satellite for quantum cryptography communication, which strongly illustrate the significance of photons to China’s current and future development in science and technology. This course will be sure to attract international students who are majored in Physics or Electronics or Photonics.

Software Process and Project Management

**Lecturer:** Dr. RONG Guoping  **Credit:** 1  
**School:** Software Institute  
**Term:** Spring Semester  
**Credit Level:** Undergraduate  

The purpose of this course is to prepare individual developers with necessary practices and approaches to perform disciplined software development. Topics include software metrics, software estimation, project planning and monitoring, quality management, team building and team-working, etc. Through both lecture sessions and lab sessions, students are expected to understand the principles, concepts, and benefits of disciplined process at individual level. Before registering for this course, students are suggested to be proficient in at least one programming language. In addition, it is helpful to be familiar with basic statistics (e.g., simple formal notations).

Computer Networks

**Lecturer:** Dr. ZHANG Yuan  **Credit:** 4  
**Department:** Computer Science and Technology Department  
**Term:** Fall Semester  
**Credit Level:** Undergraduate  

This course provides a comprehensive introduction to the basic concepts, components, principles of computer networking, design and analysis of network protocols, with an emphasis on the hybrid five-layer reference model resembling the popular TCP/IP model of the Internet. The objective of this course is to enable students to know existing architecture of computer networks and internet, understand designing principles and mechanism details of core networking protocols, perform basic networking programming, and get familiar with prevailing, and/or up-to-date networking technologies.
Introduction to Criminology

Instructor: Dr. LIU Liu Credit: 2
School: School of Social and Behavioral Sciences
Term: Spring Semester Credit Level: Undergraduate and Postgraduate

This course provides a comprehensive introduction to the sociological aspects of crime. The main focus of the course will revolve around crime measurement, patterns and trends in crime, criminological theories, and Chinese criminal justice system. Most of the lectures and reading material of this course will focus on descriptive, empirical, and theoretical research from sociology and criminology perspectives. This course emphasizes scientific research on crime, rather than moral criticism or story-telling.

Family and Society in China and Japan

Lecturer: Dr. ZHU Anxin Credit: 2
School: School of Social and Behavioral Sciences
Term: Spring Semester Credit Level: Undergraduate


Research Methods in Social Work Lecturer:

Associate professor: SHEN Hui, Ph.D
School: School of Social and Behavioral Sciences
Term: Fall Semester
Credit Level: Undergraduate Credit: 2

This course is purporting to lecture on applying scientific principles to field practice, problem formulation, intervention procedures, and impact assessment in social work. Different from other research methods course, this course focus on the research for effective social work practice. It will enable students to realize the importance of scientific reasoning, critical thinking and practice evaluation in social work. Scientific reasoning allows students to conceptualize, test, and evaluate social science theories and social work practice interventions. The use of scientific reasoning and critical thinking skills requires creativity and understanding of professional ethics and values.

History of Psychology: A Critical Examination of Knowledge

Instructor: Dr. WANG Bo Credit: 3
School: School of Social and Behavioral Sciences
Term: Spring Semester Credit Level: Undergraduate

This course (History of Psychology) explores the premises and boundaries of psychology from the perspective of history. It reflects historically and critically on how traditional psychology, which has been claiming to be accurately scientific, pretends to study human mind and behavior objectively and externally and accumulates universal laws which can describe, predict and control the essence of human mental life by taking it as something nature-like. Our discussion covers a wide range of the development of psychology and its various paradigms including philosophical psychology, religious psychology, psychophysics, Structuralism, Evolutionary psychology, Functionalism, Gestalt psychology, psychoanalysis, Behaviorism, cognitive psychology, humanistic psychology, critical psychology, Chinese psychology, etc.

Global Challenges and Cultural Engagement

Lecturer: Professor LI Shengtai Credit: 2
School: School of Social and Behavioral Sciences
Term: Fall Semester Credit Level: Undergraduate

Based on basic understanding of the dialectic between flux of globalization and how “we” are with Others, the class is expected to explore current realities and imagine futures of globalization. Throughout the course, culture will be studied as the fabric of global society in the making, that is, as challenge to face the risks of being-with-Others and probe ways therein to live and think with others.
**Politics and Diplomacy of Japan**

**Lecturer:** Prof. YAO Yuan  
**Credit:** 2  
**School:** School of Government  
**Term:** Fall Semester  
**Credit Level:** Undergraduate

An introduction to politics and diplomacy in contemporary Japan. The course is for students with an interest in the government, politics, and foreign relations of contemporary Japan and its place in the Asia and the world. Explores the interaction of political parties, the bureaucracy, interest groups, political thoughts and policy, with an emphasis on the ongoing transformation of the Japanese political system since the end of the Cold War. Special attention will be paid to contemporary affairs, such as U.S.-Japan security alliance, Yasukuni Shrine problems, Constitution problems and warfare laws. The course will also offer an interpretation of several essential issues of China-Japan relations in the 21st century.

**Digital Resource Management Technologies**

**Instructor:** OuShiyan  
**Credit:** 2  
**School:** School of Information Management  
**Term:** Fall Semester  
**Credit Level:** Undergraduate Student

With the development and popularization of computer and network technologies, various digital resources have been created and its amount increases rapidly. Digital resources have the characteristics of complexity, variety, heterogeneity and huge amount. Thus it is very necessary to adopt new technologies to aid in the storage, description, preservation, access, findability and reuse of digital assets and data. This course aims to teach the strategies and state-of-the-art information technologies relating to the management and curation of digital assets in a digital and network environment. It includes metadata, digital integration, long-term digital preservation, digital curation, digital repositories, and digital resource management systems.

**Introduction of Editing and Publishing**

**Lecturer:** Prof. ZHANG Zhiqiang  
**Credit:** 2  
**School:** School of Information Management  
**Term:** Fall Semester  
**Credit Level:** Undergraduate

This course aims to provide students with a comprehensive introduction to editing and publishing science, helping them understand the brief history of publishing and publishing science, revealing the social origin of publishing and its interaction with the society. As an introductory seminar, the course will offer a concise but explicit interpretation of policies and principles in publishing, the structure of publishing organizations and the national management of the publishing industry. Moreover, the course will deeply analyze the great changes that have taken place in publishing industry in recent years, and predict the future development of the publishing industry. Students will have the opportunities to visit some older and younger publishing houses, understanding the publishing from the woodblock printing times to digital printing era.