

SYLLABUS: ECON3513 BANK MANAGEMENT

Time and Location:

- TBA

Contact Points:

- Canvas: oc.sjtu.edu.cn (上海交通大学线上课程平台)
 - Announcement
 - Lecture notes
 - Live broadcast and recorded lecture video
 - Class Assignment
 - Project group up sign up
 - Q&A at Discussion Board
- Zoom online meeting/Tencent Meeting (zoom 视频/腾讯会议直播)
 - Live lectures in each week during the class time (每周上课时间进行直播)
 - Meeting ID and PWD: TBA
- <https://www.icourse163.org/> (中国大学慕课平台)
 - (Prerecorded) MOOC videos of each class (课程预录视频, 用于复习回看)
 - MOOC Classroom app: Interaction, survey and quizzes during the live broadcast in each week during the class time. (慕课堂 app: 直播课时互动答题, 问卷, 堂上测验等)
 - Alternative: <http://sjtu.fanya.chaoxing.com/portal> (TBA) (上海交通大学超星网课平台)

Office Hour and Contact:

- The most efficient way to contact me is by email or wechat group (QR code available at Canvas), and I will usually reply in 24 hours.
 - Email: nanli@sjtu.edu.cn
- You can also post your questions in the Discussion Board on Canvas or at icourse163.
- Teaching Assistants: TBA

Course Objectives:

This course builds on basic financial theory and the principles courses in economics. It addresses topics that are important for managing financial institutions in a rapidly changing international environment. Upon successful completion of the course, student should be able to understand the role of financial institutions in the economy; explain why banks are unique, and therefore merit special attention; to understand the analytical foundation underlying financial institutions management, and be able to use them to analyze important financial issues, including financial crisis; be familiar with risk management techniques to deal with the various risks banks and other financial institutions face.

Prerequisites:

- Finance
- Money and Banking
- Students are expected to have some background in basic economic theory (macroeconomics and microeconomics), algebra, differential calculus, statistics, and a disposition to keep themselves informed of current developments in the area of banking and finance.
- Note: Please make sure you have adequate background in analytics, linear algebra, statistics, economics and finance. This is a course in finance, with focus on the risk management and quantitative analysis. This course is NOT suitable for students without any training in economics, statistics, analytics or linear algebra.

Textbooks and References:

Textbook:

- Financial Institutions Management: A Risk Management Approach, Anthony Saunders and Marcia Cornett, 9th edition, McGraw Hill, 2017/02/09, ISBN: 9781259717772

Reference book:

- Peter S. Rose and Sylvia C. Hudgins, *Bank Management and Financial Services*, 9th Edition, International Edition, McGraw-Hill, 2013 (BMFS)
- Peter S. Rose and Sylvia C. Hudgins, *Bank Management and Financial Services*, 9th Edition (英文缩减影印版), 中国人民大学出版社
- Peter S. Rose and Sylvia C. Hudgins, *Bank Management and Financial Services* (中文版), 9th Edition, 机械工业出版社, 2016
- John C. Hull, *Risk Management and Financial Institutions*, Second Edition, Pearson, 2010

Weight of Assessment:

- Final Exam : 40%
- Class Assignments : 30%
- Presentation and Term Paper : 20%
- Class Participation : 10%

Warning:

- **Plagiarism is taken very seriously.** Students caught plagiarizing in class assignments, term paper, and/or exams in this course have been severely penalized. Any student caught cheating in the final exam will be failed in this course and reported to the school for further penalty.

Class Assignment:

There will be 3-4 class assignments. Students are encouraged to discuss on assignments, but each student should **finish the assignment on her or him own** and hand in separate answers.

Term Paper and Class Presentation:

Students are advised to form a working group of **no more than 5 students**. Each group should write a term paper and present it in the class. Each group can choose to write a paper on a case study from the list given in the syllabus or a topic related to bank risk management. However, the topic chosen by each group is subject to the approval of the lecturer.

Note: I expect each group to apply the methods/theory learned in the class to analyze the case or topic of your choice. Simple review of the case or literature review of a topic will result in low score.

The following questions should be addressed in your term paper if a case study is chosen,

- a. What has happened and how did it happen?
- b. To your opinion, what are the specific risks involved? You need to present arguments based on data or facts to support your opinion.
- c. As a bank manager, what lesson in can we learn from this case?

The following questions should be addressed in your term paper if self-selected topic is chosen,

- a. What is the question or problem?
- b. Why this question is important or interesting?
- c. How do you address this question, i.e. empirical analysis or theoretical analysis?

Each group should prepare to present the term paper in **20 minutes** with 3-5 minutes for Q&A. The presentation slides should be submitted before the presentation.

The term paper should be no more than 20 pages with double spaces and fonts no smaller than 10pt. The data source and references should be clearly and completely documented.

Timeline for term paper and presentation (subject to change)

1. Week 3-5: Form group and decide on term paper topic
2. Week 7: Bid for the case study and allocation of the topic.
3. Week 9-16: Presentation of term paper
4. On the day of Final Exam: Due date for term paper.

A “**Best Presentation**” prize will be awarded to the group who does the best job in presentation. Each group needs to evaluate the performance of other groups and the Best Presentation prize will be awarded to the group with highest average score from group evaluation and lecture evaluation.

Class Participation:

Students are encouraged to actively participate in the class discussion. Such activities include good comments, questions, articles and even pointing out flaws and typos in class material.

A “**Best Question**” prize will be awarded to the student who raises interesting questions and/or makes good comments in the class or on the forum.

List of the Case Study and Research Topics:

- AIG, Allied Irish Bank, Bankers Trust, Barings Bank, China Aviation Oil, Continental Illinois, Daiwa Bank, Lehman Brothers, LTCM, Société Générale, Washington Mutual Fund, Norther Rock, UBS Rogue Trader (2011), Citibank in 2008
- Online Banking, Mobile Payment, Micro Finance, Bitcoin, FinTech, and etc.

Suggested Periodicals:

- Asiamoney www.asiamoney.com
- The Asian Wall Street Journal www.awsj.com
- The Banker www.thebanker.com/
- The Business Times business-times.asia1.com.sg
- The Economist www.economist.com
- Euromoney www.euromoney.com
- The Financial Times www.ft.com
- The Financial Times Chinese www.ftchinese.com
- The Wall Street Journal www.wsj.com

Useful Links:

- [Federal Reserve](#)
- [Federal Deposit Insurance Corporation](#)
 - [FDIC Quarterly Banking Profile](#)
 - [FDIC Quarterly Report](#)
- [China Banking and Insurance Regulatory Commission](#) (中国银行保险监督管理委员会)
 - [Statistics \(统计数据\)](#)
- [China Banking and Insurance Regulatory Commission \(English\)](#)
 - [Statistics](#)
- [The People's Bank of China](#)
- [The People's Bank of China \(English\)](#)
- [Monetary Authority of Singapore](#)
- [China Security Regulatory Commission](#)
- [China Security Regulatory Commission\(English\)](#)

Course Outlines (subject to revision):

Topic 1: Specialness, Risks and Regulations of Financial Institutions

- **Lecture Notes 1**
- *Case Study:*
 - *Savings and Loan Debacles*
 - *Bank Run and Deposit Insurance*
 - *Video: [Bank Draft of Ri Sheng Chan--Ancient FinTech](#) 《国宝档案》 20121004 古代科技——日升昌汇票*
- Diamond, D. W. Financial Intermediation and Delegated Monitoring, *Review of Economic Studies*, vol. 51 (July 1984), pp. 393–414
- Douglas W. Diamond, Philip H. Dybvig, Bank Runs, Deposit Insurance, and Liquidity, *Journal of Political Economy*, Vol. 91, No. 3. (Jun., 1983), pp. 401-419
- FIM Chapter 1, 7, 19
- FIM **Appendix 19C**, Deposit Insurance Coverage for Commercial Banks in Various Countries
- FIM **Appendix 10B**: Black–Scholes Option Pricing Model
- FIM **Appendix 1A**, The Financial Crisis: The Failure of Financial Services Institution Specialness
- https://www.federalreservehistory.org/essays/savings_and_loan_crisis

Optional Readings:

- [Handbook of China's Financial System](#), Edited by Marlene Amstad, Guofeng Sun and Wei Xiong
- Hart, Oliver, and Luigi Zingales. 2011. "[A New Capital Regulation for Large Financial Institutions](#)." *American Law and Economics Review* 13 (2): 453-490.
- Video: [The Case For and Against Regulation](#) by Professor Oliver Hart, 2018 Nobel Laureate Shanghai Jiao Tong University Special, March 14, 2018.

Topic 2: Organization, Structure, Changing Dynamics of Banking Industry

- **Lecture Notes 2**
- *Case Study:*
 - *Mobile Payment*
 - *Shadow Banking in China after 2008*
 - *FinTech and Financial Regulation: Ant IPO Suspension*
 - *Case in Video: The Crisis of Credit Visualized by Jonathan Jarvis*
- FIM Chapter 1-2
- FIM [Appendix 2A-2D](#): Financial Statement Analysis, Depository Regulators, and Technology in Commercial Banking
- Nan Li, John D. Van Fleet, **Why Beijing was right to rein in Jack Ma's rogue Ant Group IPO**, *Nikkei Asia, Opinion*, 2021/02/28
- Nan Li and John D. Van Fleet, **Ant's road to redemption: How the fintech giant can save itself**, *SupChina*, 2021/05/18
- Nan Li and John D. Van Fleet, **Foreign media fail to understand China's fintech regulators**, *Nikkei Asia, Opinion*, 2021/10/07
- 李楠, **蚂蚁的救赎——金融科技前路何方?**, 《复旦金融评论》第 12 期, 2021/06/25
- Chen, K., Ren, J., and Zha, T. (2018). The Nexus of Monetary Policy and Shadow Banking in China. *American Economic Review*, 108(12), 3891–3936. <https://doi.org/10.1257/aer.20170133>
- [FDIC Quarterly Banking Profile](#)
- [China Banking Regulatory Commission Annual Report \(in Chinese\)](#)
- [China Banking Regulatory Commission Annual Report \(in English\)](#)
- [China Banking Industry Financial Institution](#) 国内银行业金融机构

Topic 3: Liquidity Risk and Monetary Policy

- **Lecture Notes 3**
- *Case Study:*

- *Digital RMB and Digital Currency*

- FIM Chapter 1, 12, 18-19
- FIM [Appendix 1B](#), Monetary Policy Tools
- FIM [Appendix 18A](#), Federal Reserve Requirement Accounting
- Nan Li and John D. Van Fleet, [China's digital yuan is a transaction helper, not a Trojan horse](#), *Nikkei Asia, Opinion*, 2021/05/03.
- 李楠, 陈开宇, John D. Van Fleet, [数字人民币是“特洛伊木马”吗?](#), 新华社客户端, 中国金融信息中心, 2021/05/09
- [范一飞: 关于数字人民币 M0 定位的政策含义分析](#)
- [China Monetary Policy Report](#)
- [Monetary Authority of Singapore Monetary Policy Statement](#)
- [《商业银行流动性风险管理办法》\(Commercial Bank Liquidity Risk Management Effective 2018/07/01 Published on 2018/05/23\)](#)

Topic 4: Interest Rate Risk

- Lecture Notes 4
- *Case Study: Orange County Case*
- FIM Chapter 8-9, 22-24
- FIM, [Appendix 9A](#), The Basics of Bond Valuation
- Excel File: [Duration](#)
- [《商业银行银行账簿利率风险管理指引（修订）》](#) (Commercial Bank Banking Book Interest Rate Risk Management Guidance Revised Effective on 2019/01/01, Published on 2018/05/30)
- [《商业银行银行账簿利率风险管理指引（修订）》附件](#) (Commercial Bank Banking Book Interest Rate Risk Management Guidance Revised Appendix Effective on 2019/01/01, Published on 2018/05/30)

Topic 5: VaR and Market Risk

- Lecture Notes 5
- *Case Study: Orange County Case*
- FIM Chapter 13, 15-16, 22-24
- [《商业银行市场风险管理指引》\(Commerical Bank Market Risk Management Guidance passed on 2004/12/16, Announced on 2004/12/29, Effective on 2005/3/1\)](#)
- [《市场风险资本计量内部模型法监管指引》征求意见稿 \(Internal Model for Market Risk Management 3rd Draft 2008/12/3\)](#)

Topic 6: Credit Risk

- Lecture Notes 6
- *Case Study: Credit Analysis*
- FIM Chapter 10-11, 22-26
- FIM [Appendix 10A](#), Credit Analysis

Net Zero-Carbon Fuels

Course Information			
*课程名称 (Course Name)	(中文) 碳中和燃料		
	(英文) Net Zero-Carbon Fuels		
课程类型 (Course Type)	Public course/Spring semester/APRU shared course		
授课对象 (Target Audience)	Undergraduate or postgraduate students of any discipline with interests in low carbon technology, fuel technology, environment and sustainability.		
授课语言 (Language of Instruction)	English		
*开课院系 (School)	中英国际低碳学院 China-UK Low Carbon College		
先修课程 (Prerequisite)	N/A	后续课程 (post)	N/A
*课程负责人 (Instructor)	Dr. Cheng Tung Chong	课程网址 (Course Webpage)	N/A
*课程简介 (英文) (Description)	<p>As nations bind together to tackle global climate change, one of the urgent needs is the energy sector’s transition from being fossil-fuel reliant to embracing sustainable carbon-free solutions. This course aims to introduce a redefined perspective of fuel utilisation for the power and transportation sectors, placing emphasis on alternative fuels derived from renewable resources that are essential contributors to the goals of carbon neutrality. Some of the low or zero-carbon fuels such as hydrogen, ammonia, biofuels and emerging low carbon fuels adaptable to current or new energy systems will be explored in the context of production, utilisation, economics and sustainability. The impacts of future fuels on the environment, resource availability and social well-being need to be holistically considered and supported by diverse solutions, in alignment with the Sustainable Development Goals of Affordable and Clean Energy (SDG 7) and other related SDGs as put forth by the United Nations. From this course, the students will grasp the broad concept of alternative fuel production, application and challenges faced in moving towards a net zero-carbon society.</p>		
Course objectives and contents			

<div>*课程目标 (Course Object)</div>	1. Describe the roles of alternative fuels for power and transportation sectors in the context of carbon neutrality in China and relate to the sustainable development goals.						
	2. Describe the production process, potential application and limitations of alternative fuels in the context of power and transportation sectors.						
	3. Assess the impact of alternative fuel usage on the local resources, society and nation in alignment of the sustainable development goals.						
<div>*教学内容进度 安排及对应课 程目标 (Class Schedule & Requirements & Course Objectives)</div>	Chapter	Content	Credit hour	Teaching mode	Requirement	Teaching focus	Alignment with course learning outcome
	1	Introduction to SDG with emphasis on SDG 7	2	Online lecture + discussion	Attendance	Understand the importance of SDG and sustainable development	1,2
	2	Advancements of biofuels Biodiesel, bioethanol and biogas production, application	4	Online lecture + discussion	Attendance	Comprehend the limitations that restricts or promote the production of biofuels.	1,2
	3	Biofuels sustainability: EWF + SDG perspectives	2	Online lecture + discussion	Attendance	Understand the sustainability issues related to biofuel production	3
		Topical review 1 (Biofuels) + Guest lecture	2	Group discussion + lecture	Assignment	Enhance teamwork and networking	1,2
	4	Sustainable aviation propulsion Production, application and sustainability	4	Online lecture + discussion	Attendance	Able to relate to the potential of China and other countries in producing sustainable aviation fuel.	3

*教材或参考资料 (Textbooks & Other Materials)	<ol style="list-style-type: none"> 1. Cheng Tung Chong, Jo-Han Ng, Biojet Fuel in Aviation Applications, 1st edition, Elsevier, 2021 2. Aldo Vieira da Rosa, Fundamentals of Renewable Energy Processes, 2nd ed. Academic Press, 2009 3. Agustin Valera-Medina, Rene Banares-Alcantara, Techno-Economic Challenges of Green Ammonia as an Energy Vector, 2020 <p>Other supplemental materials will be provided during the course.</p>
其它 (More)	<p>Time table for the course: week 2-17 of Spring semester 2023</p> <p>Every Tuesday, 14:00-15:40</p>
备注 (Notes)	-

Net Zero-Carbon Fuels (SDG Summer Course 2022)

Week	Date	Day	Time	Topic	Credit hours	Teaching mode	Lecturer-in-charge
1	20/6	Mon	9:00-12:00 (UTC+1) 16:00-19:00 (UTC+8)	L1: Introduction to SDG with emphasis on SDG 7	3	Online lecture + discussion	CCT
	21/6	Tue	9:00-12:00 (UTC+1) 16:00-19:00 (UTC+8)	L2: Green hydrogen as energy carrier Production, use (fuel cells and combustion) and vectors (inc. ammonia)	3	Online lecture + discussion	AVM
	22/6	Wed	9:00-12:00 (UTC+1) 16:00-19:00 (UTC+8)	L3: Green ammonia as energy carrier Production, distribution, fuel cells, combustion	3	Online lecture + discussion	AVM
	23/6	Thu	9:00-11:00 (UTC+1) 16:00-18:00 (UTC+8)	<i>T1: Topical review 1 (H₂ vectors)</i>	2	Group discussion	AVM
2	27/6	Mon	9:00-12:00 (UTC+1) 16:00-19:00 (UTC+8)	L4: Sustainable aviation propulsion Production, application and sustainability	3	Online lecture + discussion	CCT
	28/6	Tue	9:00-12:00 (UTC+1) 16:00-19:00 (UTC+8)	L5: Advancements of biofuels Biodiesel, bioethanol and biogas production, application	3	Online lecture + discussion	NJH
	29/6	Wed	9:00-12:00 (UTC+1) 16:00-19:00 (UTC+8)	L6: Biofuels sustainability: EWF + SDG perspectives	3	Online lecture + discussion	NJH
	30/6	Thu	9:00-11:00 (UTC+1) 16:00-18:00 (UTC+8)	<i>T2: Topical review 2 (Biofuels)</i>	2	Group discussion	NJH
3	4/7	Mon	9:00-12:00 (UTC+1) 16:00-19:00 (UTC+8)	L7: Electrification Power-to-X, transport electrification	3	Online lecture + discussion	CCT
	5/7	Tue	9:00-11:00 (UTC+1) 16:00-18:00 (UTC+8)	L8: Emerging zero-carbon fuels Production of methanol, waste-derived fuel, solar fuel	2	Online lecture + discussion	NJH
	6/7	Wed	9:00-11:00 (UTC+1) 16:00-18:00 (UTC+8)	<i>T3: Topical review 3 (Elec + EF)</i>	2	Group discussion	CCT
	7/7	Thu	9:00-12:00 (UTC+1) 16:00-19:00 (UTC+8)	Group project presentations	3	Group presentation	CCT/NJH/AVM
Total					32		

Food Quality and Safety Detection Technology Syllabus

课程代码 Course Code	FOST8011	*学时 Teaching Hours	32	*学分 Credits	2
*课程名称 Course Name	(中文) 食品质量安全检测技术 (English) Food Quality and Safety Detection Technology				
*授课语言 Instruction Language	全英文 English				
*开课院系 School	农业与生物学院 (College of Agriculture and Biology)				
先修课程 Prerequisite	食品微生物学 Food Microbiology, 食品化学 Food Chemistry				
授课教师 Instructors	姓名 Name	职称 Title	单位 Department	联系方式 E-mail	
	施春雷 Chunlei Shi	研究员 Professor	食品科学与工程系 Department of Food Science & Technology	clshi@sjtu.edu.cn	
	陆维盈 Weiyong Lu	副教授 Associate Professor	食品科学与工程系 Department of Food Science & Technology	weiyong.lu@sjtu.edu.cn	
*课程简介 (English) Course Description	Traditional chemical and microbiological techniques for food quality and safety are increasingly being replaced by a new generation of rapid or alternative methods able to produce results much more quickly and reliably. This course reviews the current status of these techniques from an international perspective, and with particular emphasis on commercially available detection and estimation systems.				
*教学安排 Schedules	Week				
*Schedules	1	Content	Hours	Format	Instructor
	2	Overview on detection technologies for food quality and safety	3	Classroom Teaching	Chunlei Shi
	3	Introduction to analytical chemistry methods	3	Classroom Teaching	Weiyong Lu
	4	Chromatographic and spectroscopic techniques	3	Classroom Teaching	Weiyong Lu
	5	Mass spectrometric techniques	3	Classroom Teaching	Weiyong Lu
	6	Literature reading and discussion (1)	3	Group Discussion	Weiyong Lu

	7	Introduction to traditional biological methods	3	Classroom Teaching	Chunlei Shi
	8	Novel omics technology	3	Classroom Teaching	Chunlei Shi
	9	Novel nano technology	3	Classroom Teaching	Chunlei Shi
	10-11	Novel biosensor technology	3	Classroom Teaching	Chunlei Shi
		Literature reading and discussion (2)	6	Group Discussion	Chunlei Shi
		* Grading Policy 1. Write a literature review of no less than 5000 characters in English on interested topics (50%) 2. Speech and discussion (40%) 3. Class performance (10%)			
* Textbooks & References	1. Perry G. Wang, Mark F. Vitha, Jack F. Kay. High-Throughput Analysis for Food Safety. John Wiley & Sons, Inc., 2014. 2. Mary E. Torrence, Richard E. Isaacson. Microbial food safety in animal agriculture: current topics. Iowa State Press, 2003. 3. Omar A. Oyarzabal, Sophia Kathariou. DNA Methods in Food Safety: Molecular Typing of Foodborne and Waterborne Bacterial Pathogens. John Wiley & Sons, Ltd., 2014.				
Notes					

**Shanghai Jiao Tong University
Law School**

Course Information

Academic Year 2021

Course Code: LLAW6110

Course Name: Law and Financial Markets

Course Description:

This course involves an examination of the legal framework governing banking, securities and insurance markets in China.

The course will convey some basic concepts, norms and principles in financial markets, financial law and financial regulation. These concepts, norms and principles include financial liberalization, financial repression, regulatory arbitrage, regulatory failure, regulatory capture, regulatory competition, among others.

The course begins with a discussion of the central bank, the People's Bank of China, regarding its role, activities, and regulatory power. The course will cover other main financial regulators such as CBIRC, CSRC and SAFE in China. Entry into the business of banking and regulation of the activities of banking business are examined. In addition to the regulatory regime, the law of negotiable instruments and the international transaction aspects of banking business are also treated. The course will discuss such matters as the types of security interests, principal terms of most common forms of loan facilities, basic structure of syndicated loan and international bond issues. The course will also address the causes, systemic risks and potential regulatory instruments in relation to China's booming shadow banking sector.

The course then moves into the regulatory regime governing the banking, securities and insurance industries. Restrictions of entry and activities of banking, securities, and insurance companies are examined. Prudential management and investment limitations are also dealt with. Regulatory supervision of insurance companies and regulation of insurance agents and brokers are analysed. Other topics of insurance law include: insurable interest, subrogation, the insurance contract, third party claimants, and bad faith claims.

Shadow banking would be investigated and its functions, rationales, underlying logics, and regulatory instruments would be studied in the Chinese context.

The business part of the course is to make students appreciate, distinguish and make use of terms and conditions in financial transaction-related contracts. From time to time, we would separate students into groups and ask them to take opposite roles in negotiating and drafting contracts including loan agreement, security agreement and equity transfer agreement. This is the practical part of the course. The purpose is to train our students to grasp practical experience in the course.

Expected Course Learning Outcomes:

At the end of this course, students who fulfill the requirements of this course will be able to:

- Describe and explain various theories covered such as financial liberalisation and financial repression theories;
- Describe the key features of China's financial markets;
- Use relevant information about financial law to explain economic phenomena and events;
- Apply contractual terms to various financing transactions such as lending transactions;
- Understand instructions to assist drafting relevant documents and legal concepts and doctrines in structuring banking transactions;
- Appreciate the different results from different documents;
- Undertake constant review of documentation, the law, and the interpretation of documents by the courts;
- Explain the importance of shadow banking from both business and regulatory perspectives;
- Understand the difficulty in reforming and improving the regulatory framework for the entire financial markets;
- Demonstrate legal skills and knowledge in drafting and negotiating documents in hypothetical cases.

Proposed Learning Activities:

1. Study reading materials and prepare for the classes beforehand
2. Participate in the class discussions or group discussions
3. Undertake some basic research tasks and present the research results to the class
4. Negotiate transactional documents in hypothetical cases
5. Draft one or two financial documents

Content:

Lecture 1: Financial Market, Financial Law and Financial Regulation

Lecture 2: Financial Regulators and Regulatory Framework

Lecture 3: Banks and Banking Regulation

Lecture 4: Capital Market and Securities Regulation

Lecture 5: Insurance Market and Insurance Regulation

Lecture 6: Key Financial Issues in US-China Trade War

Lecture 7: Financial Transactions

Lecture 8: Contractual Terms in Finance Documents

Lecture 9: Negotiation Exercises

Lecture 10: Drafting Exercises

Lecture 11: Revision

Proposed Assessment:

100% assessment – close book exam OR essay

Prerequisite / Co-requisite:

Ideally, the students should have some basic knowledge of Chinese legal system.

Any proposed cap on student numbers (subject to confirmation by the Head of the Department of Law):

No.

References:

Shen Wei: Conceptualizing the Regulation Thicket: China's Financial Market after the Global Financial Crisis

ISBN9780367410537

Routledge 2020

Shen Wei: Chinese Business Law: Narrative and Commentary

ISBN 978-988-13956-7-2

Wolters Kluwer 2016

Shen Wei: Shadow Banking in China: Risk, Regulation and Policy

ISBN 978 1 78471 677 6, xiv+455 pp.

Edward Elgar 2016

Shen Wei: Investor Protection in Capital Markets – The Case of Hong Kong

ISBN 978-962-661-756-4

Sweet & Maxwell 2015

Shen Wei: The Anatomy of China's Banking Sector and Regulation

Wolters Kluwer 2014

ISBN 978-988-12216-7-4

course code: LAW6326

Course name: Health Law in China

Credits: 2

Teaching Hours: 32 hours

Teacher: Jiajia YU

Course Description:

Health law in China is an interdisciplinary course which aims to establish connections between laws and medicine, the pharmaceutical industry, biotechnology and public health. It involves a complex network of regulations governing medical services, informed consent, doctor-assisted suicide, organ transplantation, assisted reproduction, infectious diseases, health insurance, digital healthcare, and pharmaceutical industry.

To solve legal issues in healthcare, one branch of law like tort law, criminal law or administrative law is not enough. The integrated application of multiple laws is a must. For students, it means challenges and also a chance to learn one and then master more than one.

Course Syllabus:

1. general description of health law in China
2. medical malpractice
3. informed consent
4. euthanasia and doctor-assisted suicide
5. organ transplantation
6. legal status of the fetus and legal protection
7. assisted reproductive technology (ART)
8. regenerative medicine and laboratory studies
9. regulatory compliance in digital health
10. communicable diseases control
11. improper marketing and corruption in the sector of healthcare
12. fraud in the sector of healthcare

Assessment format:

The students submit an assessment report at the end of the semester. The following requirements should be met:

- (1) Topic and Content: the students select one from the topics listed in the course syllabus, introduce its counterpart legal system in a foreign country and then compare it to Chinese laws.
- (2) The language: English
- (3) The length: 4000-6000 words (citation is included)
- (4) Citation: footnote

Course Syllabus

1. Course description

Academic Communications in English: Writing and Presentation is a course focusing on project-based academic writing and oral presentation. The course is designed for developing students' basic skills of academic reading, writing and presentation. Students are required to collaborate and finish series of tasks for a research project and present their work to the class. It is also intended for improving their ability of presentation for seminars and conferences in the academic world.

The process of writing and editing academic research paper on the basis of literature review and research work will be presented. Strategies and skills for oral presentations will be introduced, with a number of examples to illustrate how to start, organize, conclude and deliver a speech most effectively. Cooperation in academics will be manifested and highlighted all through the course. The coursework will include discussions on ethics, writing styles and techniques, evaluation of information resources, a group research paper, and group oral presentations based on the research paper, etc. Development of academic ethics, critical thinking, exploration, cooperation, and responsibility are all emphasized and incorporated in the process of teaching and learning.

2. Teaching methods

We are going to imitate the process of writing for publication and conference presentation through the approach of project-based learning and "learning by doing". We also employ the method of blended learning so that students can learn the knowledge on SPOC, practice in class through discussions and presentations, and apply the knowledge through writing the research paper and giving the conference presentation.

3. Course arrangement

Week	lectures and homework
Week 1	An introduction to the course Presentation (individually): An introduction of yourself and your general research interest for finding your partners. Brainstorming for your topic
	Homework: 1) Search online for the 17 goals of United Nations and find your specific research topic together. 2) Prepare for a presentation of your research topic.
Week 2	Library sources Use of EndNote Plagiarism Presentation (Student 1 for the group): The topic for your research project
	Homework: 1) Decide on your final topic and search for your sources, export them to Endnote. 2) Do plagiarism test and try to get a certificate.
Week 3	Summary and paraphrase
	Homework: Reading preparation: Appendix 3 & 4
Week 4	Academic reading 1 Reading for information Note-taking
	Homework: Read the articles you have searched for your paper, take down notes for your research.
Week 5	Academic reading 2 Reading for classifying ideas
	Homework: Continue reading the articles you have searched for your paper, try to classify them into perspectives. Submit articles you have read with notes (individually).

	Presentation (Student 2 for the group): Summary of your reading
Week 6	Language in writing COCA & Phrasebank
	Homework: Plan for your research. Familiarize yourself with the use of COCA & Phrasebank.
Week 7	Title & Outline
	Homework: Try to figure out a title and work together on the outline for your paper. Prepare for a presentation of your outline / research plan.
Week 8	Abstract Presentation of your outline / research plan (Student 3 for the group)
	Homework: Revise your outline / research plan. Start collecting your data.
Week 9	Introduction
	Homework: Write the introduction.
Week 10	Method and result
	Homework: Collect and analyze your data. Write the methods and results of your paper.
Week 11	Discussion and conclusion; citations and references
	Homework: Write the discussion and conclusion. Add the citations and references. Submit the part of the 1st draft you are responsible for (individually).
Week 12	Presentation lecture
	Homework: Prepare for the presentation. Peer review and revision. Submit the peer review (individually). Combine all parts of the paper and submit the 2nd draft (cooperatively).
Week 13	Teacher feedback 1 (Each group of students meet the teacher at due time in Tencent meeting room)
	Homework: Prepare for the presentation. Revise your research paper.
Week 14	Teacher feedback 2 (Each group of students meet the teacher at due time in Tencent meeting room)
	Homework: Prepare for the presentation. Revise your research paper.
Week 15	Research conference presentation (in the group of 3 students) 1
	Homework: Prepare for the presentation. Revise your research paper.
Week 16	Research conference presentation (in the group of 3 students) 2
	Homework: Submit your final paper and presentation PPT (cooperatively).

Note: Tasks in blue words are presentations in class, tasks in red words need submission.

4. Textbook

Academic Writing and Presentation in English

Authors: ZHANG Li, SHENG Yue

Tsing Hua University Press

《学术英语写作与演讲》

张荔 盛越

清华大学出版社

5. Evaluation

Final 40%+Mid 20%+Process 40%

Final: Research paper 40%

Mid: Presentation 20%

Process: 40%

Participation and performance in class 10%

SPOC learning 10% (50% videos and exercise + 1 discussion)

Tasks in the process 20%

Syllabus for Elementary Chinese 1 (CL036)

Course Description

This course is to build a preliminary foundation in spoken Chinese for the students within limited time and enable them to communicate in the target language for some basic functions. 250 most frequently used Chinese characters will also be taught. Meanwhile passing HSK 2 is an optional target. This course is also helpful to those who want to study Chinese language in depth in the future. No prerequisite is required.

Teaching Materials and tools

Textbook: *Hello, Chinese! (I)* by Wang Jun & An Na Shanghai Jiao Tong University Press (digital version will be provided to students)

Hello, Chinese! (introduction to Chinese characters) by An N & Wang Jun Shanghai Jiao Tong University Press (Starting from Lesson 8) (digital version will be provided to students)

Online material (MOOC): <https://www.coursera.org/specializations/learn-mandarin>

Live broadcasting: Tencent meeting/Voov meeting

Wechat group: see canvas

Course Objectives

By the end of this course, the students will:

1. Be familiar with the phonetic system in Chinese (hanyu pinyin).
2. Build up a vocabulary of approximately 400 words.
3. Be familiar with about 30 basic sentence patterns in Chinese and communicate with them.
4. Have a command of 13 communicative functions as listed in the textbook, which facilitate life in China.
5. Be able to recognize and write about 250 most frequently used Chinese characters.
6. Be able to pass HSK 2 test.

Course structure and requirements

The course provides students with MOOC (online course) support in both MOOC platform and course videos format. A student can view the entire MOOC chapter on the platform (including videos and exercises), or only the course videos after each live class. He/she can also view the live class playback once the instructor uploads it to Canvas.

Homework is on-paper written work after each live broadcasting, and students need to take photographs of them and upload to the canvas system as one source of grade (Once a week, 13 in total). The table below shows the procedures

Attendance in tencent meeting will be a crucial part of the course, anyone who fail to attend more than 1/3 of classes will fail the course immediately. A teaching assistant will check the attendance twice during each live class (one at the beginning and one by the end of the class) Quizzes will be given at the beginning of a class once the previous chapter of the book has been finished, however, due to the online instruction situation, they will not consist part of your grade. Homework (which should be uploaded to Canvas) consists a big part of the total grade. The form of Mid-term and Final exam will be introduced in the live classes.

Grading System

Quizzes.....	0 %
Homeworks.....	30 %
Mid-term.....	30 %
Final Exam	40%
Total.....	100% (passing grade: 60%)

Course Schedule (two 1.5 hr live-streamed classes per week)

Week	Contents	Objectives
2	Introduction, Phonetics	Learning the Pinyin system in Chinese
	Lesson 1 Hello!	Learning how to greet people
3	Practice for Lesson 1	Learning how to introduce one's name and nationality
	Lesson 2 What's the time?	Learning how to express numbers
4	Practice for Lesson 2	Learning how to express time: the time, years, month and dates
	Lesson 3 Go shopping	Learning how to talk about money
5	Practice for Lesson 3	Learning the expressions used in shopping
	Lesson 4 How many people are in your family?	Learning how to bargain
6	Practice for Lesson 4	Learning how to talk about family, occupations and age
	Lesson 5 What would you like to eat?	Learning how to order and talk about food
7	Practice for Lesson 5	Learning how to ask for directions and places
	Lesson 6 How to get to the library?	Learning how to talk to taxi drivers
8	Practice for Lesson 6	Learning how to ask for phone numbers
	Lesson 7 What's your phone number?	Learning how to talk about hobbies and leisure activities
9	Practice for Lesson 7	Learning how to make phone calls
	Lesson 8 What's up?	Learning how to make an appointment
10	Practice for Lesson 8	Learning how to express the location of things and places
	Mid-term Exam	
11	Lesson 9 Where is my cell phone?	Learning how to express the location of things and places
	Practice for Lesson 9	Learning some vocabulary for the human body
12	Lesson 10 Are you feeling sick?	Learning how to ask about and describe one's health
	Practice for Lesson 10	Learning the expressions related to the
	Lesson 11 I want to borrow	

	some Chinese books	library
13	Practice for Lesson 11	Learning how to express capability and possibility
	Lesson 12 I would like to exchange for some RMB	Learning the expressions related to the bank
14	Practice for Lesson 12	Learning how to express big numbers
	Lesson 13 Please clear the table	Learning the expressions for housework
15	Practice for Lesson 13	Learning the “bǎ ” sentence
	Lesson 14 I want to take a trip	Learning the expressions related to travel
16	Practice for Lesson 14	Learning how to talk about travel plans
	Lesson 15 I want to book a flight ticket	Learning how to book flight tickets and hotel rooms
17	Practice for Lesson 15	Learning the expressions used in the airport
	Final Exam	

Syllabus-Two Thousand Years of Sino-foreign Cultural Exchanges

Objectives: This course investigates cultural exchanges between China and the world throughout history. It will cover various topics, including the Silk Road trades, the Maritime Silk Road, the reception of Buddhism, Christianity, and Islam in China, the spread of Chinese inventions to the Old World, Admiral Zheng He's voyages from China to Africa during the 15th century, and other significant events.

The aim of this course is to improve cross-cultural understanding. It will demonstrate how Chinese civilization engaged in important cultural exchanges with other major civilizations via land and ocean routes, and the significant impacts these exchanges had on both the development of China and the world.

Grading Policy

30% classroom performance, 70% final exam

Schedule

Section 1: From the Origin to the Tang Dynasty

Week1: Geography of China/Chinese Writing System/Imperial System

Week 2: Relations between Qin-Han Dynasties (221B.C.-A.D.220) and Xiongnu (Huns)

Week 3: The Fall of the Han Imperial Order and the Disunion of China

Week 4: The Rise of Sui-Tang (589-907) Cosmopolitanism

Week 5: Silk Road I-Trade and the Spread of Technology

Week 6: Silk Road II-Buddhism, Islam, Persian Religion and Arts

Section Two: Song and Yuan

Week 7: The Fall of the Tang Dynasty and the Disunion of China

Week 8: Song, Liao and Jin

Week 9: Maritime Trade

Week 10: Yuan and the Mongol Empire

Spring 2025
Zhaoyang Zhang

Week 11: Silk Road III-Islam and Nestorian Christianity

Section Three: Ming and Qing

Week 12: The Fall of the Yuan Dynasty and the Rise of Ming

Week 13: Admiral Zheng He's Voyages

Week 14: Field Trip

Week 15: Jesuits in Ming and Qing China

Weeks 16: Final Exam

Wars and Revolutions in 20th Century China

Syllabus

Course Instructor: Dr YANG, Chan (yang.chan@sjtu.edu.cn).

Course Schedule: 12.55-15.40, Tuesday, Week 1-16

Course Description:

Students are introduced to major events of **China's 20th century history** from the perspective of **Memory Studies**. Several topics are covered by this course, and a major thread running through these topics is the impact of the **wars** (especially the Fourteen-year War, 1931-1945) and **revolutions**. After completing this course students can understand China's 20th Century history in a fresher way and be able to apply the analytical tools of Memory Studies to understand a given historical event or phenomenon.

Students are expected to read in preparation for *every* class. Students are expected to actively participate in group tasks, general discussions, debates, etc.

General Reading:

There is no textbook for this course, but students are suggested to read John Fairbank et al., *The Cambridge History of China, volume 12, 13, 14, 15* (Cambridge University Press, 1983-1991), and Immanuel C.Y. Hsu, *The Rise of Modern China* (Oxford University Press, 1999) for reference. In addition, reading lists, including articles and book chapters, are given for each topic.

Assessment:

- **Homework:** 25%
- **Class attendance and participation:** 10%
- **Presentation:** 20%
 - Please discuss the impact of a war/revolution on Chinese rural society/ cities/ intellectuals, by applying the analytical tools of Memory Studies
 - Presentations take place during **weeks 14-16**
- **Final papers:** 45%
 - 3000 words, due on **Friday week 18**

Topic 1: Introduction to Memory Studies (Week 1)

Week 1 (lecture + discussion) introduces theories and methodologies of Memory Studies. 'Memory' is a frequently used term in China and elsewhere nowadays. By talking about 'memory', we actually mean two types of memory: individual memory and collective memory. Key concepts of both individual and collective memory are explained, such as 'false memory', 'amnesia' and 'realms (sites) of memory'. Students are required to complete the reading and think about:

What are the pros and cons of personal testimonies as sources for history writing?

Can personal and collective memory be manipulated?

What're the problematic aspects of Halbwachs's concept of 'collective memory'?

How to bridge personal memory and collective memory?

Reading:

'What is Memory', in Richard F. Thompson and Stephen A. Madigan. *Memory: The Key to Consciousness* (Princeton University Press, 2005)

'Chapter 4 Collective Memory', in A. Whitehead, *Memory* (Routledge, 2009)

Topic 2: Wars and Revolutions in early 20th Century China (Week 2-4)

This topic aims to demonstrate that how personal memory can help us understand the 'big history', by comparing different types of sources and writings about the wars and revolutions in early 20th century China.

Week 2 (discussion + lecture) deals with the Boxer Uprising and Xinhai Revolution. Each student is required to talk about these events, ideally based on relevant chapters of Immanuel Hsu's book. Then, the course instructor will introduce sources relating to personal memory.

Week 3 (discussion) deals with the Northern Expedition and the Fourteen-year War. Students are required to identify the memory sources used in Part I, II of Hans van de Ven's book; and share your understandings as to his usage of these sources during the class.

Week 4 (discussion) deals with the Fourteen-year War, Liberation War and Korean War. Students are required to identify the memory sources used in Part IV, III of Hans van de Ven's book and share your understandings as to his usage of these sources during the class.

Reading:

Hans van de Ven. *China at War Triumph and Tragedy in the Emergence of the New China* (Harvard University Press, 2018)

Topic 3: Second World War: Remembrances, Legacies and beyond (Week 5-7)

This topic introduces the evolutionary processes of WWII remembrance in China and other ex-belligerents, and demonstrates how to conduct research on collective memory.

Week 5 (lecture) compares the WWII remembrance of the Soviet Union, China and Japan, and introduces the methodology of collective memory studies.

Week 6 (lecture + discussion) deals with the diplomatic aspects in China's WWII memory (the Fourteen, by especially looking into the correlation between China's war memory and its relationship with Japan. Students are encouraged to read the Prologue of Rana Mitter's book and Chapter 2 of Chan Yang's book, and think about:

How many names can be used to refer to the military conflict that was fought between China and Japan from 1931-1945? What does this complication of naming situation suggest?

What was the relationship between Chinese national and local Fourteen-Year War remembrance activities before 1982?

Why did the 1972 Sino-Japanese normalisation not lead to a Sino-Japanese post-war reconciliation?

Week 7 (lecture + discussion) deals with the domestic elements in China's WWII memory. Students are encouraged to read Chapter 3,4,5 of Chan Yang's book and think about:

How did Chinese official and non-official actors interact with each other to shape China's War of Resistance memory?

Reading:

'Prologue: City on Fire', in Rana Mitter, *Forgotten Ally: China's World War II, 1937-1945* (Penguin Books, 2013)

Chan Yang. *World War Two Legacies in East Asia: China Remembers the War* (Routledge, 2017)

Topic 4: "No Dogs and Chinese Allowed", Foreign Presence in China (Week 8-10)

Week 8 (lecture + discussion) introduces principal guises of foreign establishment in China in the first half of 20th Century, which was largely sustained by the foreign powers' gunboat diplomacy; these include foreign network, diplomats, missionaries, Chinese

Government Agencies, and economic interests. Students are required to read the relevant Fairbank's chapter, and think about:

How was China's sovereignty infringed by the foreign presence?

Did the 'imperialists' do anything good for the Chinese people? If yes, name two or three such things.

Week 9 (lecture + discussion) explores how the international and Chinese domestic events influenced the foreign community in China, and the breakout of the Pacific War and the subsequent Japanese internment of allied nationals will be singled out as examples of such events. Students are encouraged to read Leck's chapter and think about:

What's the impact of WWII on foreigners' life in China?

Week 10 (discussion) discusses the impact of the communist revolution on the foreigners in China, and re-examines the 'Dogs and Chinese Not Admitted' sign and the 'one hundred years of national humiliation' narrative. Students are required to read the article of Bickers and Wasserstrom, and share your understandings of this article during the class (10 minutes per student).

Reading:

'The Foreign Presence in China', in John Fairbank et al (ed) *The Cambridge History of China, Volume 12* (Cambridge University Press, 1983)

'Introduction' in Greg Leck. *Captives of Empire: The Japanese Internment of Allied Civilians in China (1941-1945)* (Shandy Press, 2007)

Robert Bickers and Jeffrey Wasserstrom, 'Shanghai's "Dogs and Chinese Not Admitted" Sign: Legend, History and Contemporary Symbol', *The China Quarterly*, No. 142 (1995), pp. 444-466

Robert Bickers. *Out of China: How the Chinese Ended the Era of Western Domination* (Penguin, 2017)

Topic 5: "Selling Piglets and Chinatowns", Overseas Chinese (Week 11-13)

The modern Chinese emigration began in the mid-19th century, when many Chinese male laborers emigrated to western countries and its colonies as a result of poverty and the political turmoil caused by the Taiping uprising. After entering the 20th century, the overseas Chinese communities developed several new features. Overseas Chinese also played an increasingly important role in China's course of rejuvenation. They were praised as the 'mother of the 1911 Xinhai Revolution', and their generous help to their compatriots during the Fourteen-year War was also much appreciated. This topic will introduce their stories.

Week 11 (lecture + discussion) deals with their history between 1900-1945. Students are encouraged to read Chapter 3, 6 of Kuhn's book and think about:

How to evaluate the role played by the Hongmen Society in overseas Chinese communities?

How Chinese governments' policy and attitudes towards emigration affected overseas Chinese communities?

Why so many overseas Chinese were so into China's domestic affairs?

Week 12 (lecture + discussion) deals with their history between 1945-1999. Students are encouraged to read Chapter 7, 8 of Kuhn's book and think about

There were many differences among overseas Chinese, in terms of region, political affliction, dialect, period of emigration and so forth, what had bonded them together?

Week 13 (lecture + discussion) deals with the War of Resistance memory of overseas Chinese. Students are encouraged to read Daqing Yang's chapter and think about:

Why to say that the Fourteen-year War changed people's impression about overseas Chinese? Did commemoration of the war serve the aim of constructing a shared identity among overseas Chinese?

Reading:

Philip A. Kuhn, *Chinese Among Others: Emigration in Modern Times* (Rowman & Littlefield Publishers, 2009)

'Introduction (pp.1-21)', in Gregor Benton and Edmund Terence Gomez. *The Chinese in Britain, 1800-Present* (Palgrave macmillan, 2008)

Daqing Yang, 'Entangled Memories: China in American and Japanese Remembrance of World WAR II', in Marc Galliccio ed. *The Unpredictability of the Past: Memories of the Asia-Pacific War in U. S.- East Asian Relations* (Duke University Press Books, 2007)

Topic 6: "Ancestral Halls", Earthbound China (Week 14)

Week 14 deals with the history and memory of Chinese rural society in the 20th century. The class of this week is designed as a student-led seminar. Each class consists of a presentation given by a student, a Q&A session, a brief background introduction by the course instructor and a general discussion session.

Questions to think about:

Was the Chinese rural society unaffected by the westernization and modernization that was going on in the first half of China's 20th century?

How was the traditional structure of a clan-based rural society changed by the Fourteen-year War, the War of Liberation, and the Land Reform Movement of the PRC?

What kinds of sacrifices did Chinese farmers make during China's socialist construction?

Reading:

'The agrarian system', in John Fairbank et al (ed) *The Cambridge History of China, Volume 13* (Cambridge University Press, 1986)

'Chapter 1', in Gail Hershatter *The Gender of Memory: Rural Women and China's Collective Past* (University of California Press, 2011)

'Special Characteristics of Rural Society', in Fei Xiaotong, *From the Soil: The Foundations of Chinese Society* (University of California Press, 1992)

Topic 7: "The Floating World": Urban China (Week 15)

Week 15 deals with China's cities and Chinese urban life in the 20th century. The class of this week is also designed as a student-led seminar. Each class consists of a presentation given by a student, a Q&A session, a brief background introduction by the course instructor and a general discussion session.

Questions to think about:

To what extent did the foreigners shape Chinese cities throughout the 20th century history?

Between 1931-1941, what was the situation like in cities of Japanese occupied territories, in cities of Free China and in cities under western control, respectively?

How did PRC's planned economy affect China's map of cities, and urban culture?

Reading:

'Chapter 1 Modernity and Nation in the Chinese City', in Joseph W. Esherick ed. *Remaking the Chinese City: Modernity and National Identity, 1900-1950* (University of Hawaii Press, 2001)

'Urban Life in the People's Republic', in John Fairbank et al (ed) *The Cambridge History of China, Volume 15* (Cambridge University Press, 1991)

Topic 8: "Long Gowns, Suits and Mao Suits": Struggles of Chinese Intellectuals (Week 16)

Week 16 deals with Chinese intellectuals in the 20th century. Again, the class of this week is designed as a student-led seminar. Each class consists of a presentation given by a student, a Q&A session, a brief background introduction by the course instructor and a general discussion session.

Questions to think about:

How do you portray the late-Qing intellectuals, the intellectuals of Republic era and nowadays?

What was the ‘ideological revolution’ in 20th century China and how it was related to the intellectuals?

What were the primary concerns of Chinese intellectuals during different periods?

The Chinese government carried out a contradictory approach towards the intellectuals, what was this approach? What consequences were brought by this approach?

Reading:

‘The Party and the Intellectuals’ & ‘The Party and the Intellectuals, phase two’, in John Fairbank et al (ed) *The Cambridge History of China, Volume 14* (Cambridge University Press, 1991)

‘Introduction(pp.5- 28)’, in Timothy Cheek . *The Intellectual in Modern Chinese History* (Cambridge University Press, 2016)

Lijing Jiang. *Educational Memory of Chinese Female Intellectuals in Early Twentieth Century* (Springer, 2018)

China's Social Welfare Policies and Practices

Lecturer: Dr. Fan Yang, Associate Professor at the School of International and Public Affairs, Shanghai Jiao Tong University

Introduction

Social welfare policies and practices is a mirror of the relationship between state and people. China's social welfare policies have witnessed vast changes in the past more than half a century, and a course in introducing the dynamic process and revealing the internal logic therein will provide a desirable angle for foreign students to understand China, as well as foster their critical thinking as with the existing frameworks in analyzing Chinese society and policy process.

This course is divided into two major sections, namely 1) the welfare policy introduction and analysis and 2) the welfare policy implementation mechanism analysis. The welfare policies covered include: pension, medical insurance, social assistance, housing, and migrant children welfare. Three guest speakers will be invited to talk about related topics, including doctor-patient conflicts, gender equality, housing and intimate relationship, and NGOs and migrant children welfare.

Goals

This is a 3-credit course, containing a total of 48 hours' courses that are divided into 16 weeks. The teaching goals include: students are able 1) to have systematic

knowledge about China's social welfare policies; 2) to know how these welfare policies are implemented and who are implementing them; 3) to use interdisciplinary and comparison perspective to analyze the logic of these welfare policies.

Assessment

The assessment of the course includes: 1) attendance, namely the attendance of course, participation of in-class discussion; 2) coursework, namely the accomplishment of group presentation and engagement in seminar discussion; and 3) course essay.

Syllabus

Week One: General introduction of the course

Week Two: Pension policy in modern China

Week Three: Seminar: What are the roles of family and government in providing care and material supports for the elderly?

Week Four: Housing welfare policy in modern China

Guest *speaker:* Dr. Yang Shen. "Housing and intimate relationship in China"

Week Five: Seminar on housing policies in modern China

Week Six: Medical insurance system in modern China

Guest *speaker:* Prof. Fang Fu (TBD). "China's Doctor-patient conflicts and medical social worker's role in it"

Week Seven: Seminar: Do patients in your country trust doctors? What are the solutions to deal with the possible conflicts?

Week Eight: Social assistance policies in modern China

Week Nine: Seminar: “I feed you and you shut up” phenomenon in global countries

Week Ten: Gender and Hukou issues in modern China’s social welfare policies

Week Eleven: Seminar: How does your welfare system treat the “outsiders”? Do you think it is generous or not? Why? Then how about China?

Week Twelve: Seminar: Are welfare policies in your country gendered? In which areas and how?

Week Thirteen: Community structure and the implementation of social welfare policies in modern China

Week Fourteen: Seminar: How does your government define community geographically? And, what is the role of community in providing welfare?

Week Fifteen NGOs and street-level bureaucrats in China’s social welfare system

Guest speaker: Ms. Cui Wang (TBD). “Welfare for China’s migrant children and what can a NGO do for it.”

Week Sixteen: Seminar: Policies in documents are always not policies in practices. Why? To what extent the street-level bureaucrat / frontline workers should be responsible for this in the welfare policies area?

Materials Chemistry Syllabus

Course Information					
*Course Code	MSE2602-1	*Credit Hours	32	*Credits	2
*Course Name	Materials Chemistry				
Course Type	Required course				
Audience	Sophomore				
Language of Instruction	English				
*School	School of Materials Science and Engineering				
Prerequisite	College Chemistry; College Physics; Thermodynamics thermodynamics of material.				
Instructors	Huanan Duan, Chuanliang Feng	Course Webpage	https://oc.sjtu.edu.cn/courses/19017		
*Description	<p>Materials chemistry is the study of the synthesis, structure, properties, and application of solid materials. Our technology-driven world is fuelled by advances in materials chemistry with examples of application in areas such as microelectronics, polymers, and energy technology. This course introduces the materials chemistry of several major categories of materials (metals, ceramics and glasses, semiconductors, polymers, nanomaterials) with the emphasis of materials synthesis. The topics span from traditional extractive metallurgy to more recent development of nanomaterials and biomaterials.</p> <p>Through the study of this course, students can master the basic knowledge and theory in the field of materials science and chemical preparation in the material industry, understand the industrial status of related fields, research frontiers, and the concepts of environmental protection and sustainable development that may be involved, and learn to analyze and solve problems by applying the basic knowledge and literature study. This course also lays a good foundation of knowledge in materials chemistry and thinking methods for the undergraduate study of materials discipline.</p> <p>The main contents of this course include the introduction of material chemistry, the theoretical basis of bonding theory and crystal field theory, basic metallurgy methods, the electrochemical methods, preparation methods for inorganic materials (including nanoparticles, thin films, ceramics etc.), synthesis and preparation of polymer materials; the chemistry of organic/inorganic hybrid materials.</p>				

*Class Schedule & Requirements	Chapter	Hours	Method	Assignment	Learning objectives	Quiz
	Chapter 1 Introduction to Materials Chemistry	2	Lecture	Homework (HW)	<ul style="list-style-type: none"> To explain why different materials are different To appraise the trend of materials development To relate the Mater. Chem. to Mater. Sci. & Eng. and the outside world 	
	Chapter 2 Metals (6)					
	Metals	2	Lecture	HW	<ul style="list-style-type: none"> To sketch the concept of electronic band structure To use the electronic band structure to explain some properties of metals 	
	Extractive Metallurgy	2	Lecture	HW	<ul style="list-style-type: none"> To weight pyrometallurgy and hydrometallurgy by comparing two cases: extraction of Fe and Cu To list general steps of hydrometallurgy To explain pyrometallurgy, hydrometallurgy, and leaching. 	
	Electrometallurgy	2	Lecture		<ul style="list-style-type: none"> to use the standard reduction potential table to explain phenomena to select appropriate electrolyte for electrolysis to assess different corrosion control techniques 	Quiz
	Chapter 3 Ceramics and Glasses (8)					
	Overview and solid state reaction (SSR)	2	Lecture	HW	<ul style="list-style-type: none"> To describe general steps involved in solid-state reactions To explain diffusion and its mechanism 	
	SSR	2	Lecture	HW	<ul style="list-style-type: none"> To describe the driving forces for sintering To name two types of sintering mechanisms and explain them 	
	Solution chemistry	2	Lecture	HW	<ul style="list-style-type: none"> To analyze the surface charge of a colloidal particle To apply the EDL to analyze the stability of colloids 	

Solution-based synthesis	2	Lecture		<ul style="list-style-type: none"> To explain alkoxides, hydrolysis, and condensation To analyze a sol-gel process To explain the water property under hydrothermal conditions To design an autoclave based on the solubility-temperature plots 	Quiz
Chapter 4 Semiconductors (6)					
Semiconductors and Si production	2	Lecture	HW	<ul style="list-style-type: none"> To apply the band structure model to explain properties of semiconductor and working mechanisms of devices To sketch the electronic band structure of doped semi and p-n junctions To describe the CZ method and the float-zone method 	
Lithography	2	Lecture	HW	<ul style="list-style-type: none"> To describe photolithography: Environment: clean room Components: light source and photoresist Step-by-step process of photolithography 	
Thin film depositions	2	Lecture		<ul style="list-style-type: none"> Be able to describe the basic mechanisms of the additive processes: Physical Vapor Deposition (evaporation, sputtering) Chemical Vapor Deposition 	Quiz
Chapter 5 Polymers (10)					
Polymer overview	2	Lecture	HW	<ul style="list-style-type: none"> Basic concepts of polymers Classification and naming of polymer compounds Classification of polymerization reactions Average molecular weight of polymer and its distribution Polymer physical state and transformation 	
Free radical polymerization	2	Lecture	HW	<ul style="list-style-type: none"> Free radical polymerization mechanism Chain-initiated reaction Free radical polymerization kinetics Average polymerization degree of polymer Factors affecting free radical polymerization Inhibition and retardation 	

	Ionic polymerization	2	Lecture	HW	<ul style="list-style-type: none"> • Cationic polymerization • Anionic polymerization • The difference between ionic polymerization and free radical polymerization • Coordination polymerization 	
	Stepwise polymerization	2	Lecture	HW	<ul style="list-style-type: none"> • Gradual addition polymerization • The molecular weight distribution • Stepwise polymerization method 	
	Organic/inorganic hybrid materials chemistry	2	Lecture	HW	<ul style="list-style-type: none"> • Concept of organic / inorganic hybrid materials • Self-assembled organic / inorganic hybrid nanomaterials • Hybridization of organic components on inorganic surfaces • Bionic organic / inorganic hybrid materials 	
	Summary					
*Assessment	HW 15% + Quiz 15% + Class participation 10% + midterm 10% + Final exam 50%					
*Textbooks	<p>There is no required textbook. Below are a few reference books:</p> <ol style="list-style-type: none"> 1) Introduction to Materials Chemistry, Harry R. Allcock, Wiley 2008. 2) Materials Chemistry by B. Fahlman, Springer, 2011 (Available as a free ebook through the SJTU library website). 3) Ceramic Processing and Sintering by Rahaman, CRC Press, 2003. 4) Chemistry – the Central Science by Theodore L. Brown, H. Eugene LeMay, Jr., Bruce E. Bursten, Catherine J. Murphy, and Patrick Woodward, Pearson Education, Inc., 2009 					

Syllabus-Fundamentals of Materials Science II

课程基本信息（Course Information）					
*课程代码 （Course Code）	MSE2606	*学时 （Credit Hours）	48	*学分 （Credits）	3
*课程名称 （Course Name）	（中文）材料科学基础				
	（英文）Fundamentals of Materials Science II				
课程性质 (Course Type)	Compulsory Course				
授课对象 （Audience）	Undergraduate students majored in materials science & engineering, metallurgical engineering, mechanical engineering and electrical engineering				
授课语言 (Language of Instruction)	English				
*开课院系 （School）	Materials Science & Engineering				
先修课程 （Prerequisite）	Fundamentals of Materials Science I, College Physics, College Chemistry, Thermodynamics of Materials, Solid State Physics				
授课教师 （Instructor）	Guo Qiang, KM Reddy	课程网址 (Course Webpage)	http://ocw.sjtu.edu.cn/G2S/OCW/cn/CourseDetails.htm?Id=343		
*课程简介 （Description）	（中文）《材料科学基础》是材料类和冶金类专业的核心基础课程。通过讲课、实验、课堂讨论和课外实践等各个教学环节，将金属学、陶瓷学和高分子物理的基础理论融合为一体，以研究材料共性规律，注重于材料的成分、组织结构、制备工艺和性能之间的内在联系，指导材料的设计和应用，并为学习后继专业课程、从事材料科学研究和工程技术工作打下坚实的理论基础。				
*课程简介 （Description）	（英文）”Fundamentals of Materials Science” is one of the core curriculum for university/college students in the discipline of materials and metallurgy. The basic fundamentals of materials science is presented by lectures, experiments, class discussions, and extracurricular practice teaching, etc. In order to investigate the common laws for materials, the focus is on the internals relationships among the processing, structure, properties and performance for three different materials: metals, ceramic and polymer physics. The course provides guidance for materials design and application and lays a solid theoretical foundation for subsequent courses, materials science research and engineering technology. This is the second part of the course that covers diffusion, phase diagrams and phase transformations.				

课程教学大纲 (course syllabus)

*学习目标 (Learning Outcomes)	<p>1、The fundamentals and frontiers of materials science & engineering (A3)</p> <p>2、Systematic knowledge on the structure-property-processing-characterization tetrahedral.(A5.4)</p> <p>3、The capability of discovering, analyzing and solving problems (B2); The ability for sustained learning (B7)</p> <p>4、Use of professional English for problem-solving and effective communication (B1)</p>
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*教学内容、进度安排及要求 (Class Schedule & Requirements)	Content	Duration (hours)	Type of teaching	Homework	Requirement	Type of evaluations
	Introduction	1	Lecture		General knowledge	
	Fick's diffusion laws	2	Lecture/discussion		Deep understanding	
	Application of Fick's laws	2	Lecture/discussion	Homework	Understanding	
	Kirkendall effect and Darken equation	2	Lecture/discussion	Homework	Deep understanding	
	Solution to diffusion problems where diffusivity is a function of concentration	1	Lecture		Understanding	
	Thermodynamics of diffusion	1	Lecture		Deep understanding	
	Atomic mechanism of diffusion	3	Lecture/discussion	Homework	Deep understanding	
	Reactive diffusion	1	Lecture		Deep understanding	
	Diffusion in ionic solids and the molecular motion in polymers	2	Lecture/discussion	Homework	Deep understanding	
	Thermodynamics of phase diagrams	3	Lecture/discussion	Homework	Deep understanding	
	Fundamentals of phase diagrams	1	Lecture		Understanding	

	Single phase diagrams	1	Lecture/discussion	Homework	Deep understanding	
	Simple binary phase diagrams	5	Lecture/discussion	Homework	Deep understanding	Mid-term exam (closed book)
	SiO ₂ -Al ₂ O ₃ phase diagram	1	Lecture		Understanding	
	Fe-C phase diagram	3	Lecture/discussion	Homework	Deep understanding	
	Fundamentals of ternary diagrams	2	Lecture/discussion		Deep understanding	
	Immiscible ternary eutectic phase diagrams	2	Lecture/discussion	Homework	Deep understanding	
	Ternary eutectic phase diagrams with limited miscibility	2	Lecture/discussion	Homework	General knowledge	
	Other ternary phase diagrams	1	Lecture		General knowledge	
	Introduction of solid state phase transformations	3	Lecture		Understanding	
	Characteristics of solid state phase transformations	4	Lecture/discussion	Homework	Deep understanding	
	Nucleation & growth	4	Lecture/discussion	Homework	Deep understanding	
	Kinetics of phase transformations	1	Lecture		Understanding	
*考核方式 (Grading)	<p>(成绩构成)</p> <p>The final grade includes class participation, homework, in-class quizzes, and exams:</p> <p>(1) Class participation: 10%.</p> <p>(2) In-class quizzes and homework: 20%;</p> <p>(3) Exams (closed book): 70%, where the mid-term exam comprises 20%, and the final exam 50%.</p>					
*教材或参考资料 (Textbooks & Other Materials)	<p>1) W. D. Callister, Jr., Fundamentals of Materials Science & Engineering, 5th Edition, John Wiley & Sons, Inc. New York, 2001.</p> <p>2) 《材料科学基础(第三版)》, 胡赓祥、蔡珣、戎咏华编著, 上海交通大学出版社, 2010</p>					

	<p>3) R. E. Smallman , Modern Physical Metallurgy, 4th ed. Butterworths, London, 1985</p> <p>4) A. G. Guy, Introduction to Material Science, McGraw-Hill, New York, 1972</p> <p>5) D. R. Gaskell, Introduction to thermodynamics of materials, 5th Edition, Taylor & Francis, 2008</p> <p>6) D.V. Regone, Thermodynamics of materials, Volume I, John Wiley & Sons, 1995</p> <p>7) Porter & Easterling, Phase Transformations in Metals & Alloys 2nd Edition, CRC Press, 1992</p> <p>8) R. W. Hertzberg, Deformation & Fracture Mechanics of Engineering Materials, John Wiley & Sons, 1976</p> <p>9) Hull & Bacon, Introduction to Dislocations, 5th Edition, Elsevier, 2011</p>
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SYLLABUS

Lie Groups and Lie Algebras

22 Feb 2022 to 11 Jun 2022

Mondays 8:00 a.m.- 10:45 a.m.

Week 1-16

By **Prof. Tudor Stefan Ratiu**

Chinese Government Friendship Award (2020)

Fellow of European Academy of Sciences (2019)

Shanghai Magnolia Memorial Award (2018)

Tullio Levi-Civita for the Mathematical and Mechanical Sciences Award

American Mathematical Society Fellow (2012)

Russian Megagrant Winner (2011)

Credits: 3

Course Outline:

PART 1: Lie Algebras (8 topics, each taught for two weeks)

The four infinite series of classical simple complex Lie algebras

Nilpotent and solvable Lie algebras, fundamental theorems

Semisimple Lie algebras

Representation theory for $SL(2, \mathbb{C})$

Root space decomposition

Abstract root spaces and their properties

Weyl group, simple roots, order relation, Weyl chambers

Classification via Dynkin diagrams

PART 2: Lie Groups (8 topics, each taught for two weeks)

Review of basic calculus on manifolds. Definition of Lie groups. Examples.

The Lie algebra. The exponential map. The three adjoint actions

Baker-Campbell-Hausdorff, Lie's First Fundamental Theorem

Lie subgroups, Lie group homomorphisms, link to exponential map

Classification of connected Abelian Lie groups

Connected component of the identity. Simply connected Lie groups

Lie's Second Fundamental Theorem

Lie's Third Fundamental Theorem, informal discussion