

## Accounting

### Online Winter School @ Fudan SOE 2021

Course Title	Accounting		
Credit	3	Credit Hours	48 credit hours
Course Objectives	<i>On successful completion of this subject, students should be able to:</i> 1. Appraise the role of accountants and accounting information in the business environment. 2. Apply accounting information in external and internal decision contexts of a business. 3. Demonstrate analytical skills needed to process accounting information; prepare internal and external financial statements and be able to interpret accounting reports. 4. Evaluate basic business and accounting information provided in popular business cases. 5. Effectively understand and communicate accounting information in a business context.		
Course Description	The course focuses on accounting objectives, accounting information generation, accounting report preparation methods, and accounting standards, including basic accounting theory, basic methods of accounting and basic operating techniques. Through the study of this course, students can understand the emergence and development of accounting, clarify the basic functions, characteristics, objects, tasks of accounting, and the basic premise and general principles of accounting; understand and master accounting elements, accounting subjects and accounts, double-entry records; be able to read and compile accounting statements, and perform calculation and analysis of financial indicators related to the accounting statements; understand the relevant content of the accounting work organization and China accounting standards.		
<b>Course Requirements:</b> Prerequisites: Students must achieve at least 60% of the subject’s total marks. Students must also attend 80% of tutorial workshops.			
<b>Teaching Methods:</b> Lecture (online live) : Lecture, tutorial discussion			
Course Schedule			

Lecture topic	Tutorial topic	Tutorial tasks and skill development
Ch1 Financial statements	Ch1	Problems in Ch1:  P1-58A/59A/60A/61A/63A  understanding , analysis and application of accounting knowledge
Ch2 Transactions analysis	Ch2	Problems in Ch2:  P2-60A/61A/62A/63A/64A  understanding , analysis and application of accounting knowledge
Ch3  Accrual accounting and income	Ch3	Problems in Ch3:  P3-59A/60A/61A/62A/63A/64A/65A/66A  understanding , analysis and application of accounting knowledge
Ch4  Internal control and cash	Ch4	Problems in Ch4  P4-48A/49A
Ch5  Short-term investment and receivables	Ch5	Problems in Ch5  P5-55A/56A/58A/59A  understanding , analysis and application of accounting knowledge
Ch6  Inventory and Cost of goods sold	Ch6	Problems in Ch6  P6-62A/63A/64A/65A/66A/67A/68A/69A/70A  understanding , analysis and application of accounting knowledge
CH7  Plant assets, natural resources and intangibles	CH7	Problems in Ch7  P7-66A/67A/68A/69A/70A/71A/72A/73A  understanding , analysis and application of accounting knowledge
CH9  Liabilities	CH9	Problems in Ch 9  P9-71A/72A/73A/74A/75A/76A/78A/79A  understanding , analysis and application of accounting knowledge

CH10 Shareholders Equity	CH10	Problems in Ch10  P10-72A/73A/74A/75A/76A/77A/78A  understanding , analysis and application of accounting knowledge	
<b>The design of class discussion or exercise, practice, experience and so on:</b> Lecture: 30 credit hours Tutorial: 18 credit hours			
<b>Grading &amp; Evaluation:</b>			
	<b>Assessment Types</b>	<b>Weight</b>	
1	Assignment	40%	
2	Final Exam ( open book )	60%	
<b>Teaching Materials &amp; References:</b> Walter T Harrison, Charles Horngren, William Thomas, Wendy Tietz. Financial accounting. Pearson. Eleventh global edition.(ISBN:9787302561934)			

## China's Modern Economy

### Online Winter School @ Fudan SOE 2021

Course Title	China's Modern Economy		
Credit	3	Credit Hours	48 credit hours
Course Objectives	Successful students will: 1. Understand the history and the characteristics of Chinese economy, culture and politics; 2. Understand how to critically think about the effectiveness of Chinese government policies; 3. Develop research ideas on Chinese economy		
Course Description	Beginning in 1978, economic reforms guiding China from a planned economy toward a market-oriented one have promoted the GDP to grow at an over 8% annually. Today, China has become the 2nd largest economy in the world. We will start with the historical background of this transition process and then will cover selected post-reform topics, such as one child policy, hukou system, environmental challenges. We will first focus on the economic behavior and economic lives of Chinese households, then move to firm's behaviors. Lastly, we will discuss the role of government in economic activities and the persistent effect of history.		
<b>Course Requirements:</b> Prerequisites: 1. Introductory micro- and macro- economics; 2. Basic statistics and econometrics			
<b>Teaching Methods:</b> Lectures (online live)			
<b>Course Schedule</b> 1-1 General Overview 1-2 Economic Reform 2-1 Labor Market/hukou system 2-2 Education and Health 2-3 One Child policy/Demographic Transition 2-4 Environmental Issue 3-1 Globalization 3-2 FDI and foreign firms 4-1 Government and Economic Activities 4-2 Persistence of History			
<b>The design of class discussion or exercise, practice, experience and so on:</b> Students are encouraged to ask questions, and propose research ideas during the class.			

**Grading & Evaluation:**

Class participation: 10%

Homework: 20%

Research proposal: 30%

Final exam(closed-book): 40%

Passing grade: 60

No make-up test

**Teaching Materials & References:**

- (1) Naughton, Barry. *The Chinese Economy*, 2nd Edition, MIT press, 2018.
- (2) Brandt, Loren and Thomas Rawski. 2008. *China's Great Economic Transformation*. Cambridge: Cambridge University Press.
- (3) *Economists* Magazine has a lot of interesting articles, especially on China.

## Corporate Finance

### Online Winter School @ Fudan SOE (2021)

Course Title	Corporate Finance		
Credit	3	Credit Hours	48 credit hours
Course Objectives	The purpose of this course is to help the students develop general insights on important topics in the area of corporate finance. After this course, they are expected to develop skills and knowledge necessary for the financial management of the corporations. Also, they will learn to find answers to corporate issues based upon theoretical models and empirics in this course.		
Course Description	This course covers a wide range of topics in corporate finance including valuation of various assets in the capital markets, real options, financial statement analysis, firm's capital structure and pay out policy, short-term financial planning, corporate governance and M&A.		
Course Requirements: Prerequisites: Micro-economics			
Teaching Methods: Lecture, presentation, group discussion			
Course Schedule This outline may change as the session proceeds. 1. Outline and introduction of the course 2. Time value of money and present value 3. Risk and return 4. Bond and stock valuation 5. Optimal portfolio choice and CAPM 6. Fundamentals of capital budgeting 7. Real options 8. Financial statement analysis 9. Equity and debt financing 10. Theories on capital structure 11. Payout policy 12. Advanced valuation 13. Working capital management and short-term financial planning 14. Corporate governance 15. Mergers and acquisitions 16. Review and class discussion			

**The design of class discussion or exercise, practice, experience and so on:**

**Project of firm valuation**

**Grading & Evaluation:**

Check in and class participation	<u>15%</u>
Final exam (project)	<u>80%</u>

**Teaching Materials & References:**

Class notes and "Corporate Finance", Jonathan Berk and Peter Demarzo, Pearson;

## Econometrics

Online Winter School @ Fudan SOE 2021

Course Title	Econometrics		
Credit	3	Credit Hours	48 credit hours
Course Objectives	This course aims to provide students with a basic understanding of econometrics and its applications to both cross-sectional and panel data. After the course, students should be able to carry out simple regression analyses, including estimation and inference.		
Course Description	This course aims to provide students with a basic understanding of econometrics and its applications to both cross-sectional and panel data. After the course, students should be able to carry out simple regression analyses, including estimation and inference.		
<b>Course Requirements:</b> Prerequisite courses: Calculus I, Linear Algebra, Probability Theory, Statistics			
<b>Teaching Methods:</b> Lectures (online live)			
<b>Course Schedule:</b> 1. Introduction a) What is Econometrics b) Stock and Watson Ch 1 2. Probability Theory and Statistics a) Random variables; Population and sample; Distributions; Moments. b) Stock and Watson Ch 2,3 3. Simple Regression Model			



- a) Linear regression models with one regressor; Ordinary Least Square (OLS) estimator; Assumptions of OLS; Measure of fit.
  - b) Stock and Watson Ch 4
- 4. Inference
  - a) One-sided and Two-sided Hypotheses; Confidence interval; Binary explanatory variables; Gauss-Markov assumptions; t-test.
  - b) Stock and Watson Ch 5
- 5. Regression Model with Many Regressors
  - a) Omitted variable bias; Multiple regressors; OLS for multiple regression models; Multicollinearity; Joint hypothesis testing.
  - b) Stock and Watson Ch 6,7
- 6. Specifications
  - a) Nonlinear model; Polynomial and logarithm; Interaction between regressors;
  - b) Stock and Watson Ch 8
- 7. Endogeneity
  - a) Causes of endogeneity; Endogeneity bias; Instrumental variables (IV); Two stage least square (2SLS) method.
  - b) Stock and Watson Ch 9,12
- 8. Panel Data
  - a) Panel structure; Time series dimension; Fixed effect model; Estimation.
  - b) Stock and Watson Ch 10
- 9. Binary Choice Models
  - a) Binary dependent variables; Linear probability model; Logit and Probit models; Maximum Likelihood Estimation (MLE).
  - b) Stock and Watson Ch 11
- 10. Introduction to Big Data Methods

**The design of class discussion or exercise, practice, experience and so on:**

There are four problem sets containing both theoretical exercises and practical problems to be solved using statistical software. These problem sets are designed to help the students understand the materials of the course more thoroughly.

**Grading & Evaluation:**

The course grade will be based on the performance on the problem sets to be given throughout the semester (80%), and a final exam (20%).

Late submission is NOT accepted. Academic integrity is expected. Failure to comply will result to immediate failure of the course and may be subject to further investigations/penalties by the university regulations.

**Teaching Materials & References:**

1. J. Stock, M. Watson, Introduction to Econometrics, Pearson, 2019
2. J. Wooldridge, Introductory Econometrics: A Modern Approach, Cengage Learning, 2019
3. J. Wooldridge, Econometric Analysis of Cross Section and Panel Data, Massachusetts Institute of Technology, 2010

## Industrial Organization

Online Winter School @ Fudan SOE 2021

Course Title	Industrial Organization		
Credit	3	Credit Hours	48 credit hours
Course Objectives	Industrial organization is about the study of firms in markets. Industrial organization focuses on firm behavior in imperfectly competitive markets, which appear to be far more common than the perfectly competitive markets that were the focus of your basic microeconomics course. This field analyzes the acquisition and use of market power by firms, strategic interactions among firms, and the role of government competition policy.		
Course Description	<p>The course will address topics and questions such as:</p> <ul style="list-style-type: none"><li>• What are the Industries and Markets? What are the unilateral exercises of market power?</li><li>• How can firms use nonlinear pricing schemes to increase profits?</li><li>• How do contractual relations between firms affect prices, profits, and welfare?</li><li>• How does the non-price competition between firms affect prices, profits, and welfare?</li><li>• When and how should government intervene in markets and implement the industrial policy?</li></ul>		
<p><b>Course Requirements:</b></p> <p>The students are expected to learn from the abstract theorem to the empirical analysis and case study, build up the connection between the economic theory and real-life observations and master independent research skills to explain economic phenomena in the real-life setting.</p> <p><b>Prerequisites:</b></p> <p>Intermediate Microeconomics</p>			
<p><b>Teaching Methods:</b></p> <p>We will approach these subjects from both theoretical and applied perspectives: Theory, Empirical Application and Case Study.</p>			
Course Schedule			
Class #	Time	Date	Topic
			Reading
			Assignments

1	Part I: Industrial Organization: Overview	PRN 1	
2	Part I: Industry and Market	Handout	
3	Part II: Price discrimination I	PRN 5	
4	Part II: Price discrimination II	PRN 6	
5	Part III: Static Games & Cournot Competition	PRN 9	
6	Part III: Bertrand Competition	PRN 10	
7	Part III: Dynamic Games	PRN 11	PS1 due
8	Part IV: Horizontal Merger	PRN 15	
9	Part IV: Vertical and Conglomerate Merger	PRN 16	
10	Part V: Research and Development	PRN 20	
11	Case Study Presentation		PS2 due
12	Case Study Presentation		
13	Final Exam		
<p><b>The design of class discussion or exercise, practice, experience and so on:</b></p> <p>The course will combine the basic theoretical analysis with several case studies. For example,</p> <p>Part II: Price discrimination</p> <p>Case Study1: Is the price in my shopping app the same as others'? First degree price discrimination</p> <p>Case Study2: Is student discount a real discount? Third degree price discrimination</p> <p>Part IV:</p> <p>Case Study1: Why can Didi and Uber merge in China? Horizontal Merger</p> <p>Case Study2: Why does Alibaba take over OFO? Conglomerate Merger</p>			
<p><b>Grading &amp; Evaluation:</b></p> <p><b>Grades:</b> 100points</p> <p>Final Exam (Open Book, 24 hours): 40%</p> <p>Case Study and Group Presentation: 60%</p> <p>*Case Study: Provide the background for the case you are interested in, Identify the basic IO concepts, Use the basic model or rationale learned in this class to analyze this specific case you have chosen. 20-30mins group presentation.</p>			
<p><b>Teaching Materials &amp; References:</b></p> <p><b>Textbook:</b></p> <p>Pepall, Lynne, Dan Richards and George Norman (PRN). "Industrial Organization: Contemporary Theory and Empirical Applications." Willy, April 2014</p> <p>Porter, Michael E. "On Competition." Harvard Business School Press, October, 1998</p> <p><b>Additional Reference:</b></p> <p>Shy, Oz. "Industrial Organization: Theory and Application." MIT, 1996</p>			

## International Finance

Online Winter School @ Fudan SOE 2021

Course Title	International Finance				
Credit	3	Credit Hours	48 credit hours		
Course Objectives	This course is about international macroeconomics and international finance. It will help students understand the macroeconomic and financial linkages between countries.				
Course Description	Topics include national income accounting, the balance of payments, the operation of the exchange rate systems, the international capital market, the international monetary system, and the mechanisms of adjustment of exchange rate, interest rate, current account balance, output and price level in response to monetary and fiscal policies. Some issues regarding the Chinese economy, such as the current account imbalance and capital flow, and RMB exchange rate will also be discussed.				
<b>Course Requirements:</b> Prerequisites: Intermediate Microeconomics; Intermediate Macroeconomics					
<b>Teaching Methods:</b> Lecture (online live)					
<b>Course Schedule</b>					
Session	Chapter	Hour	Contents and key points	Text/ reference	Homework and questions
Session 1	Introduction and The Balance of Payments	3	Topics to cover; The relevance of international monetary economics in reality; The course arrangement;	KOM Chapter 13  FT Chapter 1	
Session 2	The Balance of Payments II	3	The national income accounts; The balance of payments accounts identity;	KOM, Chapter 13 FT Chapter 6 SGUW Chapter 1	
Session 3	Exchange rate II	3	Equilibrium in the foreign exchange market; UCIP;	KOM Chapter 14  FT Chapter 4	

Session 4	Exchange rate III	3	Given UIP condition, we highlight the consequence of monetary policy shock on exchange rate dynamics	KOM Chapter 15	Homework 1
Session 5	Exchange rate IV	3	Exchange rate in the long run: PPP theory. Introduction of real exchange rate and relative prices.	KOM Chapter 16 FT Chapter 3	
Session 6	Exchange rate V	3	Foreign Exchange rate in Practice	ER Chapter 5, Chapter 7	
Session 7	Output and the Exchange Rate in the Short Run	6	We use the AA-DD framework to analyze the long-term effect and short-term effect of monetary policy and fiscal policy	KOM Chapter 17	
Session 8	Fixed exchange rate and foreign exchange	6	Based on AA-DD model, we analyze the trade-off of different exchange rate regime.	KOM Chapter 18 FT chapter 9	Homework 2
Session 9	Fixed exchange rate or flexible exchange rate, and cross country coordination	3	We introduce the IS-LM model, which is slightly different from AA-DD model;  A case study of UK in 1992. The cooperative/non cooperative arrangement of monetary policy under fixed exchange rate regime.	FT Chapter 7 FT Chapter 8	
Session 10	International monetary system: an historical view	3	Summarize the historical experience on the international monetary system in the last century	KOM Chapter 19	
Session 11	Optimum currency area and Euro	3	The criteria to choose the optimum currency area and the euro experience	KOM Chapter 21 FT Chapter 10	
Session 12	Financial globalization and the crisis	3	We try to understand what has caused the rapid growth in international financial activity?	KOM Chapter 20 FT Chapter 1	
Session 14	Sovereign debt and default	3	We introduce the sovereign debt and how is the debt related with	KOM Chapter 22 FT Chapter 11	Homework 3

			macroeconomics fundamental	SGUW Chapter 15	
Session 15	Current account and exchange rate in China	3	A special focus on China: A summary of monetary policy and exchange rate policy in the past 30 years.	Additional materials	
<b>The design of class discussion or exercise, practice, experience and so on:</b> Exercise, discussion					
<b>Grading &amp; Evaluation:</b> Performance     20% Homework        30% Final              50%					
<b>Teaching Materials &amp; References:</b>					
NO.	Authors	Title		Publisher	Year
1(Required)	Paul R.Krugman Maurice Obstfeld Marc Melitz (abbreviated as KOM)	<i>Krugman, Obstfeld and Melitz, International Economics: Theory and Policy</i> (Ninth Edition)  (The International Finance part)		清华大学出版社	2016
2	Robert Feenstra Alan Taylor (abbreviated as FT)	International Macroeconomics (Third Edition)		中国人民大学出版社	2017
3	Stephanie Schmitt-Grohe, Martin Uribe and Michael Woodford (abbreviated as SGUW)	International Macroeconomics		In preparation for Princeton University Press.	2019
4	Maurice Obstfeld and Kenneth Rogoff (abbreviated as FT)	<i>Foundations of International Macroeconomics.</i>		中国金融出版社	2010

5	Cheol Eun, and Bruce G. Resnick (abbreviated as ER)	International financial management (8 <sup>th</sup> edition)	McGraw Hill Education	2018
<p>The lecture is based on Krugman’s book. If other materials are to be used, I will share the related chapters with you.</p>				

## International Trade

### Online Winter School @ Fudan SOE 2021

<b>Course Title</b>	International Trade		
<b>Credit</b>	3	<b>Credit Hours</b>	48 credit hours
<b>Course Objectives</b>	Demonstrate understanding of essential concepts of international trade and related professions.		
<b>Course Description</b>	This course covers the basics of international trade theory and policy. It introduces students to the main theoretical concepts of international trade, ranging from the Ricardian comparative advantage theory to the new trade theory. This course explores the patterns of trade among countries, policies that impede or promote free trade, as well as their welfare and distributional implications.		
<b>Course Requirements:</b> Prerequisites: Principle of Economics			
<b>Teaching Methods:</b> Lecture (online live)			
<b>Course Schedule</b>			
<b>Week</b>	<b>Lecture topic</b>	<b>Tutorial topic</b>	<b>Assignments and skill development</b>
1	What is International Economics About?	Ch1	Discussion on Gains from Trade, the Gravity Model, Impediments to Trade and the Changing Pattern of World Trade
2	World Trade: An Overview	Ch 2	To cultivate students' mindset for international trade.
3	Labor Productivity and Comparative dvantage: The Ricardian Model	Chp 3	Discussion on Comparative Advantage and Ricardo Model  To cultivate students' basic theory and mind set for comparative advantage.
4	Resources, Comparative Advantage, and Income Distribution	Ch 4	Discussion on A Model of a Two-Factor Economy, the Political Economy of Trade, the Heckscher-Ohlin Model  To cultivate students' analytical ability and skills of applying international theory.
5	The Standard Trade Model	Ch 5	Discussion on A Standard Model of a Trading Economy, International Transfers of Income, and Tariffs and Export Subsidies  To cultivate students' analytical ability and skills of applying international theory.



6	Economies of Scale, Imperfect Competition, and International Trade	Ch 6	Discussion on Economies of Scale, Imperfect competition, External Economies and International Trade To cultivate students' analytical ability.
7	International Factor Movements	Ch 7	Discussion on International Labor Mobility, and International Borrowing and Lending To cultivate students' mindset for international factor movements.
8	The Instruments of Trade Policy	Ch 8	Discussion on Basic Tariff Analysis, and other instruments of Trade Policy To cultivate students' basic knowledge and mindset for trade policy.
9	The Political Economy of Trade Policy	Ch 9	Discussion on Free Trade, Income Distribution and Trade Policy, International Negotiations and Trade Policy To cultivate students' analytical ability and skills of applying trade policy
10	Trade Policy in Developing Countries	Ch 10	Discussion on Import-Substituting Industrialization, and Export-Oriented Industrialization To cultivate students' analytical ability and skills of applying trade policy
11	Controversies in Trade Policy	Ch 11	Discussion on Sophisticated Arguments for Activist Trade Policy, and Globalization and the Environment To cultivate students' analytical ability
12	Revision	Ch 1 – 11	Revision of all topics

**The design of class discussion or exercise, practice, experience and so on:**

This course is taught in lectures, group discussions and practical group workshops. The lectures provide the structure of the topic, discussion of the theory and some practical examples. The group discussions provide an opportunity to discuss ideas, ethical issues and make practical application of the trading theory as a team. The group workshops provide students a chance to apply those skills to serve different organizations.

**Grading & Evaluation:**

**Assessment Tool 1: Assignment**

Students are expected to form a group of 5-6 people. Each group is required to finish a case study based on the theories and concepts delivered from chapter 1-11.

**Assessment Tool 2: Final Exam**

Final exam is a 120-minute close-book examination. It covers all the topics from week 1 – 11.

	Assessment Tool	Weight	Due Dates
1	Assignment	40%	Week 10

	2	Final Exam	60%	Exam Week	
<b>Teaching Materials &amp; References:</b> International Economics: Theory and Policy (trade part), Paul R. Krugman; Maurice Obstfeld; Marc J. Melitz, Ninth Edition. PEARSON. Tsingsua Publishing Company. 1. New Trade Models, New Welfare Implications Marc J. Melitz, Stephen J. Redding American Economic Review. VOL. 105, NO. 3, MARCH 2015, pp. 1105-46. 2. Poultry in Motion: A Study of International Trade Finance Practices Pol Antràs, C. Fritz Foley Journal of Political Economy. VOL.123, NO. 4, August 2015, pp. 853–901. 3. Comparative Advantage and Optimal Trade Policy Arnaud Costinot, Dave Donaldson, Jonathan Vogel and Iván Werning The Quarterly Journal of Economics (2015) 130 (2): 659-702. 4. Dynamic Selection: An Idea Flows Theory of Entry, Trade, and Growth Thomas Sampson The Quarterly Journal of Economics (2016) 131 (1): 315-380. 5. Estimates of the Trade and Welfare Effects of NAFTA Lorenzo Caliendo, Fernando Parro Review of Economic Studies (2015) 82 (1): 1-44 6. A Linder Hypothesis for Foreign Direct Investment Pablo Fajgelbaum, Gene M. Grossman, Elhanan Helpman Review of Economic Studies (2015) 82 (1): 83-121.					

## Introduction to AI

### Online Winter School @ Fudan SOE 2021

Course Title	Introduction to AI – Probabilistic Reasoning and Decision Making		
Credit	3	Credit Hours	48 credit hours
Course Objectives	<ul style="list-style-type: none"><li>• Describe and use different probabilistic models including Bayes Nets and EM algorithm</li><li>• Apply probabilistic models to solve real-world problems</li><li>• Design specific models for AI tasks</li><li>• Perform inference using probabilistic models</li><li>• Prove relationships between probabilities under different models</li><li>• Implement core algorithms of different models</li><li>• Describe how agents learn from data using maximum likelihood learning</li><li>• Identify ethical concerns related to AI</li><li>• Broad exposure to current AI developments</li></ul>		
Course Description	This course will introduce students to the probabilistic and statistical models at the heart of modern artificial intelligence. Possible topics to be covered include: probabilistic methods for reasoning and decision-making under uncertainty; inference and learning in Bayesian networks.		
<b>Course Requirements:</b> Prerequisites are elementary probability, statistics, linear algebra, and calculus, as well as basic programming ability in some high-level language such as C, Java, Matlab, R, or Python. Programming assignments are completed in the language of the student's choice. Students should satisfy the pre-requisites before enrolling this class as AI classes are math heavy.			
<b>Teaching Methods:</b> Lecture (online live), recorded research talks from top AI conferences			
<b>Course Schedule</b> Day 1: Course overview, Modeling uncertainty, review of probability. Day 2: Examples of probabilistic reasoning. Day 3: Belief networks: from probabilities to graphs. Day 4: Conditional independence, d-separation. Day 5: Inference in polytrees and loopy networks. Day 6: Learning, maximum likelihood estimation. Day 7: Naive Bayes and Markov models. Day 8: Latent variable models, EM algorithm. Day 9: Examples of EM algorithm. Day 10: Estimating Noisy-OR parameters with EM Day 11: Other AI topics (such as HMM or Q-learning) Day 12: Final Exam			

**The design of class discussion or exercise, practice, experience and so on:**

Exercise and practice

**Grading & Evaluation:**

Your final grade will be determined via the following percentages:

Lecture participation points: 10%

Homework: 45%

Final: 45%

**Important grading policies:**

- You must score at least 55% on the final exam to pass the course. If you score lower than 55% on the final, you will receive an F for the course, regardless of your overall average.
- You must score at least 55% overall for the homework assignments.
- All homework should be done individually.
- According to Fudan University's policy, there is a threshold on the percentage of students who may receive A or A- in a class. Please keep this policy in mind.
- There will be no make-up exam

**Teaching Materials & References:**

- Artificial Intelligence: Foundations of Computational Agents, 2nd ed. by Poole and Mackworth. An online version of this textbook can be found on the publisher's website: <https://artint.info/2e/html/ArtInt2e.html>
- Artificial Intelligence: A Modern Approach, 3rd ed by Russell and Norvig.

## Probability and Statistics

Online Winter School @ Fudan SOE 2021

Course Title	Probability and Statistics		
Credit	3	Credit Hours	48 credit hours
Course Objectives	After you finish the course, you are supposed to <ul style="list-style-type: none"><li>• Develop a deep understanding of probability and statistics and a solid intuition for statistical concepts.</li><li>• Learn how the mathematical ideas of statistics carry over into the world of applications in economics and finance.</li></ul>		
Course Description	<p>This course provides necessary probability and statistics background for undergraduate for their courses in econometrics, microeconomics, and macroeconomics. Statistics and mathematics are two basic analytic tools in economics. Statistics is an essential tool to study situations involving uncertainties, in the same way as calculus is essential to characterize optimizing behaviors in economics. For example, probability theory is needed in study of game theory. In macroeconomics, as Robert Lucas points out, the introduction of stochastic factors can provide much new insights into dynamic economic systems. Indeed, probability and statistics are necessary analytic tools in every field of economics. Of course, the demand for probability and statistics varies from field to field in economics, with econometrics most heavily using it.</p> <p>The analysis will be conducted in a relatively rigorous manner. Formal proofs will be given for some important theorems, because the proofs themselves can aid understanding and in some cases, the proof techniques or methods have practical value.</p> <p>In addition to developing a fundamental understanding of probability and mathematical statistics that are most relevant to modern econometrics, this course also tries to develop a sound intuition for statistical concepts from economic perspective. For example, why are statistical concepts (e.g., mean and variance) useful in economics? What are economic intuition and interpretation for the probability and statistical relations?</p>		
Course Requirements:			
Prerequisites: Calculus, Linear algebra			

**Teaching Methods:**

Live lectures and homework assignments.

**Course Schedule**

**Chapter 1: Introduction to Econometrics**

**Chapter 2: Foundation of Probability Theory (6 hours)**

- 2.1 Random Experiments
- 2.2 Basic Concepts of Probability
- 2.3 Fundamental Probability Laws
- 2.4 Conditional Probability and Independence
- 2.5 Bayes' Rule

**Chapter 3: Random Variables and Probability Distributions (3 hours)**

- 3.1 Random Variables and Distribution Functions
- 3.2 Discrete Random Variable
- 3.2 Continuous Random Variables
- 3.3 Functions of a Random Variable
- 3.4 Joint Probability Distribution
- 3.5 Conditional Probability Distribution
- 3.6 Independence

**Chapter 4: Mathematical Expectations (3 hours)**

- 4.1 Univariate Mathematical Expectations
- 4.2 Moments and Moment Generating Function
- 4.3 Multivariate Mathematical Expectations
- 4.4 Covariance and Correlation
- 4.5 Conditional Expectations and Conditional Moments

**Chapter 5: Introduction to Sampling Theory and Statistics (3 hours)**

- 5.1 Normal Distribution
- 5.2 Student's t Distribution
- 5.3 Snedecor's F Distribution
- 5.4 Chi-square Distribution
- 5.5 Central Limit Theorem

- 5.6 Population and Random Sample
- 5.7 Sampling Distribution of Sample Mean
- 5.8 Sampling Distribution of Sample Variance

**Chapter 6: Parameter Estimation and Evaluation (6 hours)**

- 6.1 Population and Parameter Estimation
- 6.2 Point Estimators and Mean Squared Error Criterion
- 6.3 Best Unbiased Estimators
- 6.4 Confidence Interval Estimators

**Chapter 7: Hypothesis Testing (6 hours)**

- 7.1 Introduction to Hypothesis Testing
- 7.2 Hypothesis Testing for Population Mean
- 7.3 Hypothesis Testing for Population Variance

**Chapter 8: Conclusion (6 hours)**

**The design of class discussion or exercise, practice, experience and so on:**

Class participation is highly recommended. Students are encouraged to share their thoughts or current works in class.

**Grading & Evaluation (Provide a final grade that reflects the formative evaluation process):**

Student grade in this courses will be based on:

Homework: 40%

Final Exam: 60% , cumulative, open-book

**Teaching Materials & References:**

Walpole, Myers, Myers and Ye., Barry, Probability and Statistics for Engineers and Scientists, Pearson, 2016.

## Psychology and Life

Online Winter School @ Fudan SOE 2021

Course Title	Psychology and Life		
Credit	3	Credit Hours	48 credit hours
Course Objectives	Upon completion of this course, students should be able to: <ul style="list-style-type: none"><li>● Have a solid understanding of basic concepts, methods, and results in the study of Psychology</li><li>● Apply these theories to their own personal and professional experiences</li><li>● Think critically, focusing on research methods</li></ul> Be able to appreciate and critically evaluate the basic meaning, if not every detail, of novel findings in psychology and neuroscience.		
Course Description	The field of psychology is very broad and covers both the Micro-level analyses of nerve cell processes and the macro-level analyses of cultural systems. This course is designed to give students an overview of topics within the field of psychology, such as perception, attention, memory, language, emotion, motivation, and personality et al. Students will be introduced to the basics of the scientific method, so that they could use solid scientific research to combat with psychological misconceptions. Whether or not a psychology major, students will see why psychological knowledge is directly relevant to the decisions we make every day of your lives. Furthermore, they will be encouraged to come up with their own empirical questions about Psychology.		
Course Requirements:			
Prerequisites: N/A			
This is an introductory course of Psychology. Students who are interested in what Psychology is about and how psychological knowledge is relevant to their lives are welcomed.			
Teaching Methods:			
<ul style="list-style-type: none"><li>• Lectures</li><li>• Class discussions</li><li>• Student presentations</li></ul>			



## **Course Schedule**

### **Week 1**

- 1.1 Introduction to course & Chapter 1. Thinking Critically with Psychological Science
- 1.2 Chapter 2. Research Methods in Psychology
- 1.3 Chapter 3. The Biological and Evolutionary Bases of Behavior & Chapter 5 Mind, Consciousness, and Alternate States

### **Week 2**

- 2.1 Chapter 4 Sensation and Perception
- 2.2 Chapter 6. Learning and Behavior Analysis
- 2.3 Chapter 7. Memory

### **Week 3**

- 3.1 Chapter 8. Language & Chapter 11. Motivation
- 3.2 Chapter 9 Intelligence and Intelligence Assessment.
- 3.3 Chapter 10. Human Development Across the Life Span

### **Week 4**

- 4.1 Chapter 13 Personality
- 4.2 Chapter 14. & 15 Psychological Disorders and Therapies
- 4.3 Open book exam

## **The design of class discussion or exercise, practice, experience and so on:**

Students will form small groups of 4-6 people and study by groups. There are two kinds of group assignments:

### **1. Micro-homework**

Each group will be asked to post a summary of their discussion after the study of each lecture (no more than 1 page). This summary may include (1) points that they think most impressive in this lecture, or /and (2) problems that they don't understand, or/and (3) questions that they would like to raise to other groups. The purpose of this homework is to urge students to reflect upon what has been taught, and to ensure they understand the basic contents in each lecture.

### **2. Presentation:**

Each group will be required to present related papers to each chapter in the class. More details about group presentation will be provided in the first class. I also encourage students to present papers by their own interest.

## **Grading & Evaluation:**

- Course participation – 20%
- Homework – 20%
- Group Presentation – 20%
- Final Exam – 40%

The final exam will be an open-book written exam composed of multiple-choice questions and short-essay questions.

No make-up exam will be provided.

**Teaching Materials & References:**

Richard J. Gerrig, Psychology and Life, 20th Edition, Pearson Education, Inc. 2012

Chinese version: 心理学与生活（第 19 版）【美】理查德·格里格 & 菲利普·津巴多著,人民邮电出版社,出版时间： 2016 年 1 月

## Risk Management and Derivatives

Online Winter School @ Fudan SOE 2021

Course Title	Risk Management and Derivatives		
Credit	3	Credit Hours	48 credit hours
Course Objectives	<ul style="list-style-type: none"><li>- Students will learn when arbitrage arguments are not sufficient to evaluate investment opportunities, and make use of utility theory and mathematical optimization models to determine optimal decisions.</li><li>- Students will gain a basic structure about quantitative finance, learn the definition and application of the various derivatives, and how to apply binomial trees to price financial derivatives.</li><li>- Students will master how to the apply risk measures such as Value at Risk and Expected Shortfall in risk management framework.</li></ul>		
Course Description	This course covers derivatives such as options, forward contracts, futures contracts, and swaps. Students will learn to make decisions by taking into account such features as interest rates, and rates of return. They will learn about the concept of arbitrage, and when consideration of such is sufficient to price different investments. Applications to call and put options will be given. Moreover, we will introduce the hedging strategies using futures and options, and mechanics of option markets, properties of stock options, options on stock indices and currencies as well as the various types of exotic options. Finally, theories about binomial trees, Wiener processes, Ito’s Lemma, Black-Scholes-Merton Model will be further illustrated.		
<b>Course Requirements:</b> Prerequisites: Foundations of Finance Statistics			
<b>Teaching Methods:</b> Lecture (online live) Approximately 3 hours each time, 3 times every week.			
<b>Course Schedule</b>			
Day	Lecture	Readings	
Day 1	Introduction	Chapter 1	
Day 2	Futures Markets and Central Counterparties Hedging Strategies Using Futures	Chapter 2 Chapter 3	
Day 3	Interest Rates Determination of Forward and Futures Prices	Chapter 4 Chapter 5	
Day 4	Interest Rate Futures	Chapter 6	
Day 5	Swaps	Chapter 7	
Day 6	Mid-term Exam	N/A	

Day 7	Mechanics of Options Markets Properties of Stock Options	Chapter 10 Chapter 11
Day 8	Options on stock indices and currencies Exotic options	Chapter 17 Chapter 26
Day 9	Trading Strategies Involving Options	Chapter 12
Day 10	Binomial Trees The Greek letters	Chapter 13 Chapter 19
Day 11	Volatility smiles Value at risk and expected shortfall Martingales and measures	Chapter 20 Chapter 22 Chapter 28
Day 12	Final Exam	N/A

**The design of class discussion or exercise, practice, experience and so on:**

Discussion: We may use Wechat, Tencent or Zoom online meetings for class discussion every week.

Practice and exams: There will be two online exams in total as below:

- Mid-term exam (2 hours)
- Final exam (2 hours)

**Grading & Evaluation:**

Your final grade will be determined via the following percentages:

Attendance	10%
Midterm exam	40%
Final Exam	50%

**Important grading & evaluation policies:**

- You must score at least **55%** on both the midterm and final exams with final grade over **60** to pass this course.
- According to Fudan University’s policy, there is a threshold on the percentage of students who receive A or A- in a class. Please keep this policy in mind.
- No make-up exam.
- Academic integrity is expected. Failure to comply will result to immediate failure of the course and may be subject to further investigations/penalties by the university regulations.

**Teaching Materials & References:**

Options, Futures and Other Derivatives, John C. Hull, 10th Edition, Pearson Education.

Reference Book: 《Fundamentals of Futures and Options Markets》《Introduces Quantitative Finance》

## Social Media and Social Networking

Online Winter School @ Fudan SOE (2021)

Course Title	Social Media and Social Networking		
Credit	3	Credit Hours	48 credit hours
Course Objectives	After taking this class, students will: <ul style="list-style-type: none"><li>• gain and advance their knowledge in this area for a better understanding of the role that social media and social networking currently play in our daily life in both societies;</li><li>• obtain and improve their independent- and critical-thinking ability;</li><li>• be able to review and criticize the influence and implications of social media and social networking from a cross-national, cross-cultural, and a comparative perspective; and</li><li>• get prepared as would-be pursuers of further knowledge in relevant courses at higher levels as well as of a career in the most viable field of media and communication now and in the future.</li></ul>		
Course Description	<p>This issue-driven, student-centered graduate course discusses both the theories and practices regarding social networking and converged/integrated communication via social media today.</p> <p>This course also examines interrelationships among media, communication, politics, economy, technology, business, social institutions, and individuals, as well as a variety of issues concerning the role and influence of social media and social networking in the society as a whole.</p> <p>This course is designed for would-be researchers or pursuers of a career in the most viable fields of employment now and in the future.</p>		
<b>Course Requirements:</b> Prerequisites: None			
<b>Teaching Methods:</b> This course is devoted to creating a student-centered learning environment, by adopting a balanced approach to covering both the breadth and depth of the subjects. Course activities mainly include lectures, reading assignments, student-led discussions, substantial discussions in an all-class or small group setting based on assigned readings, social media activity, group project, and final presentation.			
<b>Course Schedule</b>  <b>Week 1</b> <ul style="list-style-type: none"><li>● Self-introduction</li><li>● Introduction to the course: syllabus, schedule, assignments, expectations</li><li>● Reading/Course reserve</li></ul>			

- Grouping
- Discussion assignments
- Guideline for student-led discussion
- Overview of social media and social networking
- History of social media and cultural of connectivity
- Social networking-basics, conceptions, concerns and psychological foundations
- Connected and networked society
- Networked public and networked self
- Social media and privacy

## Reading

Book chapters:

Jose van Dijck. (2013). *The Culture of Connectivity: A Critical History of Social Media*. Oxford

University. (available for online reading through e-Library)

- Chapter 1 “Engineering Sociality in a Culture of Connectivity”
- Chapter 2 “Disassembling Platforms, Reassembling Sociality”

Jacob Silverman. (2015). *Terms of Service*. HarperCollins.

- Chapter 1 “The Ideology of Social”

Zizi Papacharissi (Ed.) (2011). *A Networked Self: Identity, Community, and Culture on Social Network Sites*. Routledge.

- “Introduction”

Borko Furht. (Ed). (2010). *Handbook of Social Network Technologies and Applications*. Springer.

- Chapter 1 “Social network analysis: History, Concepts and Research”

Charles Kadushin. (2012). *Understanding Social Networks: Theories, Concepts and Findings*. Oxford University Press.

- Chapter 1 “Introduction”

Charles Kadushin. (2012). *Understanding Social Networks: Theories, Concepts and Findings*. Oxford University.

- Chapter 2 “Basic Network Concepts, Part I”
- Chapter 3 “Basic Network Concepts, Part II”
- Chapter 5 “Psychological foundations”

Lee Rainie, & Barry Wellman. (2012). *Networked: The New Social Operating System*. Cambridge, MA: MIT Press.

- Part 1 “The Triple Revolution” (four chapters)
- Part 2 “How Networked Individualism works” (five chapters)

Zizi Papacharissi (Ed.) (2011). *A Networked Self: Identity, Community, and Culture on Social Network Sites*. Routledge.

- Chapter 1 “Interaction of Interpersonal, Peer, and Media Influence Sources Online”
- “Conclusion”

Unpublished paper:

Alise Tifentale. (2014). The Selfie: Making sense of the “Masturbation of Self-Image” and the “Virtual Mini-Me.” The Graduate Center, The City University of New York.

## Week 2

- Social media and social networking sites
- Facebook, connected friendship and mediated intimacy
- Twitter, Firechat, Telegram, civic engagement and movement
- Instagram, Pinterest, and Snapchat: visual-oriented consumption of Information

## Reading

Book chapters:

Jose van Dijck. (2013). *The Culture of Connectivity: A Critical History of Social Media*. Oxford University.

- Chapter 3 “Facebook and the Imperative of Sharing”
- Chapter 4 “Twitter and the Paradox of Following and Trending”
- Chapter 5 “Flickr between Communities and Commerce”

Deborah Chambers. (2013). *Social Media and Personal Relationships: Online Intimacies and Networked Friendship*. Palgrave MacMillan.

- Chapter 1 “Introduction”
- Chapter 2 “Technologically Mediated Personal Relationships”
- Chapter 4 “Self-Presentation Online”
- Chapter 7 “Digital Dating and Romance”
- Chapter 9 “Mediated Intimacies”

Alex Lambert. (2013). *Intimacy and Friendship on Facebook*. Palgrave MacMillan.

Zizi Papacharissi (Ed.) (2011). *A Networked Self: Identity, Community, and Culture on Social Network Sites*. Routledge.

- Chapter 2 “Social Network sites as Networked Publics”
- Chapter 3 “Social Networking”
- Chapter 4 “Social Network Sites as Virtual Communities”
- Chapter 9 “United We Stand?”

Paolo Gerbaudo. (2012). *Tweets and the Streets: Social Media and Contemporary Activism*. Pluto Press. (available online reading at e-library)

- Chapter 1 “Friendly Reunion”
- Chapter 4 “The hashtag which did (not) start a revolution”

Jessica L. Beyer. (2014). *Expect Us: Online Communities and Political Mobilization*. Oxford University Press.

- Chapter 1 “Online Communities and Political Mobilization”

Journal articles:

Paul S. N. Lee, Clement Y. K. So & Louis Leung (2015). Social Media and Umbrella Movement: insurgent public sphere in formation. *Chinese Journal of Communication* [Special Issue: Media Communication and the Umbrella Movement]. DOI: 10.1080/17544750.2015.1088874

Yuheng Hu, Lydia Manikonda, & Subbarao Kambhampati. (2014). *What We Instagram: A First Analysis of Instagram Photo Content and User Types*. Proceeding of ICWSM.

Raphael Ottoni, et al. (2013). *Ladies First: Analyzing Gender Roles and Behaviors in Pinterest*. Association for the Advancement of Artificial Intelligence.

Joseph B. Bayer, et al. (2015). Sharing the small moments: ephemeral social interaction on Snapchat. *Information, Communication & Society*. DOI: 10.1080/1369118X.2015.1084349

### Week 3

- YouTube, UGC and integration of broadcasting networks
- Social media and news use
- Social media and journalism

### Reading

Book chapters:

Jose van Dijck. (2013). *The Culture of Connectivity: A Critical History of Social Media*. Oxford University.

- Chapter 6 “YouTube: The Intimate Connection between Television and Video Sharing”

Jean Burgess & Joshua Green (2009). *YouTube: online video and participatory culture*. Cambridge; Malden, MA: Polity.

- Chapter 1 “How YouTube Matters”
- Chapter 2 “YouTube and the Mainstream Media”
- Chapter 3 “YouTube’s Popular Culture”

Pelle Snickars & Patrick Vonderau. (Eds.). (2009). *The YouTube reader*. Stockholm: National Library of Sweden.

- Chapter “The Entrepreneurial Vlogger” (in Part II)
- Chapter “The Political Economy of YouTube” (in Part V)

Zizi Papacharissi (Ed.) (2011). *A Newtworked Self: Identity, Community, and Culture on Social Network Sites*. Routledge.

- Chapter 7 “Typology of Social Network Site Usage”
- Chapter 12 “Look at Us”

Rena Bivens. (2014). *Digital Currents: How Technology and the Public are Shaping TV News*. University of Toronto Press.

- Chapter 1 “UGC and Citizen Journalism” (pp.19-22);  
“Social Networking Service” (pp. 22-28)

Jacob Silverman. (2015). *Terms of Service*. HarperCollins.

- “Churnalism and the Problem of Social News”

Eugenia Siapera & Andreas Veglis. (2012). *The Handbook of Global Online journalism*. Wiley-Blackwell.

- Chapter 13 “The Economics of Online Journalism”
- Chapter 14 “Crowdsourcing Investigative Journalism”
- Chapter 17 “Social Journalism”

Reports:

Pew Research Center (2015). *Social Media Usage: 2005-2015*.

<http://www.pewinternet.org/2015/10/08/social-networking-usage-2005-2015/>

Pew Research Center (2014). *How social media is reshaping news*.

<http://www.pewresearch.org/facttank/>

2014/09/24/how-social-media-is-reshaping-news/

Pew Research Center (2015). *The Evolving Role of News on Twitter and Facebook*.



<http://www.journalism.org/2015/07/14/the-evolving-role-of-news-on-twitter-and-facebook/>  
Pew Research Center (2013). *News Use Across Social Media Platforms*.  
<http://www.journalism.org/2013/11/14/news-use-across-social-media-platforms/>  
Pew Research Center (2015). *How do Americans use Twitter for news?*  
<http://www.pewresearch.org/fact-tank/2015/08/19/how-do-americans-use-twitter-for-news/>  
More on Pew reports on social networking:  
<http://www.pewinternet.org/topics/social-networking/>

#### Journal articles:

Teresa Correa, Amber Willard Hinsley, & Homero Gil de Zúñiga. (2010). Who interacts on the Web?: The intersection of users' personality and social media use. *Computers in Human Behavior* 26, 247–253.

#### Week 4

- Sharing ideology and sharing economy
- Social media and strategic communication
- Social networking and social influence

#### Reading

##### Articles:

Uber, Airbnb and consequences of the sharing economy: Research roundup.  
<http://journalistsresource.org/studies/economics/business/airbnb-lyft-uber-bike-share-sharing-economy-research-roundup>  
Eyal Ert, Aliza Fleischer, & Nathan Magen. (2015). Trust and Reputation in the Sharing Economy: The Role of Personal Photos in Airbnb. *Available at SSRN 2624181*.  
Shu-Chuan Chu. (2011). Viral advertising in social media: participation in Facebook groups and responses among college-aged users. *Journal of Interactive Advertising*, 12, 1 (Fall), 30-43.  
Rowena L. Briones, Beth Kuch, Brooke Fisher Liu, & Yan Jin. (2011). Keeping up with the digital age: How the American Red Cross uses social media to build relationships. *Public Relations Review*, 37, 37–43.  
Lee Rainie. (2012). Social media and voting. Pew Research Center Internet and American Life. Available [https://mktcom.net/PDFs/PIP\\_TheSocialVote\\_PDF.pdf](https://mktcom.net/PDFs/PIP_TheSocialVote_PDF.pdf)  
Gang (Kevin) Han, & Wen Wang. (2015). Mapping user relationships for health information diffusion on microblogging in China: A social network analysis of Sina Weibo. *Asian Journal of Communication*, 25 (1), 65-83, DOI: 10.1080/01292986.2014.989239  
Robert M. Bond, et al. (2012). A 61-million-person experiment in social influence and political mobilization. *Nature*. doi:10.1038/nature11421

##### Book chapters:

Victoria A. Farrar-Myers, & Justin S. Vaughn. (Eds.). (2015). *Controlling the Message: New Media in American Political Campaigns*. New York, NY: New York University Press.

- Chapter 1 “Strategic Communication in a Networked Age”
- Chapter 2 “Congressional Campaigns” Motivations for Social Media Adoption”
- Chapter 8 “The Influence of User-Controlled Messages on Candidate Evaluations”

Charles Kadushin. (2012). *Understanding Social Networks: Theories, Concepts and Findings*. Oxford University.

- Chapter 9 “Networks, Influence and Diffusion”

Thomas W. Valente (2010). *Social Networks and Health: Models, Methods, and Applications*. Oxford University.

- Chapter 3 “Methods”
- Chapter 4 “Network Effects”
- Chapter 5, 6, 7, 8, 9, 11, 12
- Chapter 10 “Diffusion of Innovations”

Brian G. Southwell. (2013). *Social Networks and Popular Understanding of Science and Health: Sharing Disparities*. Johns Hopkins University Press.

- Chapter 3 “Information-Sharing Behavior”
- Chapter 4 “Individual-Level Factors”
- Chapter 5 “Community-Level Factors”
- Chapter 6 “Content-Level Factors”

**The design of class discussion or exercise, practice, experience and so on:**

Lectures, reading assignments, student-led discussions, substantial discussions in an all-class or small group setting based on assigned readings, social media activity, group project, and final presentation.

**Grading & Evaluation:**

	DATE/DEADLINE	TOTAL POINTS	% OF GRADE	
Student-led discussion	(weekly)	200	20	
In-class discussion	(weekly)	200	20	
Class attendance	(weekly)	100	10	
Social media activity	(before the last class)	50	5	
Group project	(before the last class)	300	30	
Final presentation	(The last class)	100	10	
Peer-evaluation		50	5	

**Final grade scale**

A 950-1000	C+ 770-799
A-900-949	C 730-769
B+870-899	C- 700-729
B 830-869	D 600-699
B-800-829	F 0-599

**IN-CLASS DISCUSSION (20%)**

**Class formats will primarily be based on class discussion.** Asking and answering questions is the key to your success in this class. We will have in-class discussion in every class meeting, focusing on the issues/topics covered in that week. The purpose of the

discussion is to encourage you to actively get involved in critical thinking. You will receive credit only if you are in class. No make-up.

Your active class participation, therefore, will be highly expected, as well as graded. Your appearance in the classroom without answering or being willing to answer any questions (e.g., saying “I don’t know” to the instructor’s questions) or actively working with your group members will tremendously and negatively affect your final grade. The instructor welcomes questions to clarify the material, and will expect your informed perspective to be shared through comments in class. The instructor will also call on those who have not voluntarily participated. Your active class participation, therefore, will be highly expected, as well as graded.

The instructor RESERVES ALL THE RIGHT to assign the grade in this category according to your performance in class discussion—1) level of cooperation with your groupmates, and team work; 2) level of cooperation with the instructor; 3) level of engagement and level of concentration; 4) overall attitude (e.g., respectful to each other; no whispering or chatting while others are answering questions), and 5) quantity and quality of answers or inputs, etc.—partially based on the instructor’s observation and impression. Attendance (even missing no class) while keeping silence or showing negative attitude to participation in class discussion will negatively affect the scores received for this category.

**Grouping.** Two or three students will work together in groups on discussions. They will then combine to be one group working on the term paper and the final presentation. Grouping will be arranged first according to your preference. You need to talk to one another for the possibility of working as members in the same group, as you wish, during the first class meeting of the semester. Grouping will be confirmed once the class size is fixed. Those who cannot find preferred group members would be randomly assigned.

#### **CLASS ATTENDANCE (10%)**

Your attendance to all classes or team meetings is REQUIRED unless you have an excused absence for athletic competition, medical or family emergency. Documentation is required for these cases. Giving the instructor a heads-up via email is REQUIRED to avoid misinformation on this matter. If you have an ongoing medical issue that affects your attendance in class consecutively, please make sure that the instructor is made aware of it earlier rather than later, and this will be handled on a case-by-case basis under the school’s policy and guidance.

Every student is REQUIRED to stay in class throughout the whole class meeting. NO leaving early without excuse or instructor’s permission is allowed. In the case that you have to leave the class earlier, the instructor must be informed in advance through an email heads-up with excuse explained at a minimum of 12 hours but preferably one day ahead. A verbal request for leaving early in classroom just before the class starts is NOT acceptable.

At the end of the semester if you have missed, or, if you leave early from, more than three classes for which you have not been excused, your final course grade will be reduced by a

notch, for example from a B to a B-. Habitual lateness, absences and leaving early more than three times will also be dealt with on a case-by-case basis.

It will be necessary for each group to meet outside class to work together to meet deadlines.

### **SOCIAL MEDIA ACTIVITY (5%)**

All students in this class are required to have a Twitter and/or a Weibo account. You are encouraged to play with it and to follow some accounts/folks for learning purpose. You must initiate at least 5 tweets/posts relevant to communication over the period covered by the class. You can post your own tweets/messages, or retweet/forward those posted by your “followings/fans” although you can retweet/forward the messages that are posted by your classmates. Use “#2020socialmedia” or “#FIS20socialnetworking” as the hashtag every time when you tweet/retweet, or “#20复旦国际学期#” on Weibo. This activity will be summarized and reported to the instructor by the end of the last class meeting in early August.

### **STUDENT-LED DISCUSSION (20%)**

We will have a student-led discussion every week since the second week. Each two- or three-member group will lead one formal discussion session on certain topics/issues over this semester. Each group member will work as a presenter/discussant. Workload should be shared evenly and fairly. Topics/issues and scheduling will be randomly assigned to each group at the beginning of the semester. The student-led discussion sessions will be evaluated by the instructor.

Each group in the session will lead a 20-minute presentation/discussion by criticizing the different aspects regarding the theory/topic/issue presented, supplementing what is thought to be missed from the previous lecture or discussion, additional examples/cases, expanding areas, application of theory in profession and practice, and the ongoing debates over relevant issues. In preparation, all members need to work together by sharing the workload evenly and fairly.

The rest of the class, or those who are not scheduled for the discussion in a particular class need to read assigned materials, get familiar with the issue and ask questions as required. Following group presentation, everyone in other groups must ask at least one specific questions for the presentation group for all-class discussion.

The discussion cannot be a repetition of the previous lecture or questions already discussed in class. After the all-class discussion based on audience’s questions, the leading group then needs to provide at least ONE specific question, by the choice of the group, for all-class discussion, in order to encourage fellow students’ critical thinking and interaction (Additional guideline on the format of the discussion session will be provided, if needed, in a separate handout).

The topic chosen must be confirmed by the instructor **two days ahead of the class meeting assigned**. PPT slides and other visual aid(s) are required. Questions and PPT slides should be

sent to the instructor for a preview **via email**.

### **GROUP PROJECT (30%)**

Each combined six-member group needs to choose a topic/issue, as the examples suggested below, to develop a social marketing campaign proposal, including research plan, objectives/strategies and tactics, by applying social media platforms as the main communication channels to a hypothetical yet specific scenario.

More detailed guidelines will be provided in a separate handout.

Every group member should contribute to each part of the project equally. Please indicate who did which part when you turn in your assignment.

**Due dates.** Assignments are always due at the beginning of class on the designated due date. **No** extensions will be granted for written assignments except for documented medical or other emergencies, **not** including computer or printer problems. Be familiar with the location of computer labs on campus and save your work frequently. Late papers will be downgraded 10% — one full grade — for each day that you don't turn them in.

### **FINAL PRESENTATION (10%)**

Every combined six-member group will give a final presentation to the class bases on their group project. The final presentation will be evaluated by the instructor. Handout will be provided separately.

### **PEER EVALUATION (5% of total)**

In the last week of class, each group member will evaluate the contributions of other members on the discussion session and the term paper. Scores will be factored into the final grade.

### **GENERAL POLICIES FOR GRADES/CLASS**

**The “non-negotiable” policy.** Please note that assigned grades are not a “basis for negotiation.” No grade re-evaluations request will be considered. Email messages or face-to-face communication discussing an expected grade or requesting an increase of grade or saying that “I am an A student in other classes;” “I should receive an A for this class,” and the like, are **NOT** acceptable.

**The “no re-write” policy.** Once an assignment has been submitted, no “re-writes” or submission of additional work for higher grades will be accepted.

**Keeping in Touch.** Email is the best way to contact the instructor.

### **ACADEMIC HONESTY**

According to the University policy, any form of academic misconduct—cheating in exams, falsification of data, plagiarism, etc. (examples are given in the catalog)—will result in a grade of "F" for the course and we will have to pursue the academic misconduct grievance

procedures. In addition, unless you are instructed to work in groups, you are expected to submit your own work.

**DISCLAIMER**

Any elements of this syllabus are subject to change. Changes will be announced in class, or by e-mail.

**Teaching Materials & References:**

No required textbooks. Book chapters, journal articles, news stories or industry information, and up-to-date research findings will be assigned for reading.

All are photocopied or available online. Additional readings will be provided as the semester progresses (The tentative reading list is included in the class schedule).

You are required to go through the reading assignments BEFORE each class meeting.

Please try to stay current with the reading so that you will have a context for the class, although we may also cover different material in the lectures than in the readings.

## Topics in Development Economics

### Online Winter School @ Fudan SOE 2021

Course Title	Topics in Development Economics		
Credit	3	Credit Hours	48 credit hours
Course Objectives	The course aims to build up students' critical-thinking skill through reading the most recent empirical development economics literature and participating in class discussion.		
Course Description	<p>This course covers a comprehensive list of topics that are related to economic development. We begin with one of the key results from the development accounting literature: total factor productivity is the most important factor in explaining economic development. We then study a set of different institutions and examine their impacts on economic productivity. In particular, we will focus on state capacity, property right, contract institutions, corruption, state-owned enterprises, technology, and taxation. Lastly, we discuss the status quo of innovation, which is a key driver of TFP growth and the implication of economic development on economic inequality.</p> <p>In the meantime, the course will introduce students a variety of methodological approaches to address a number of empirical questions, such as what are the main driving force of aggregate productivity in China, are there resource misallocation in China, what is the value of political connection in Indonesia, and why some countries have more complicated government hierarchy whereas others do not. The course aims to build up students' critical-thinking skill through reading the most recent empirical development economics literature and participating in class discussion.</p>		
<b>Course Requirements:</b> Prerequisites: Microeconomics, statistics, and econometrics (or applied economics).			
<b>Teaching Methods:</b> Lecture, homework, group presentation, class discussion			
<b>Course Schedule: (48 credit hours in total)</b>  1. Development facts and accounting <ul style="list-style-type: none"><li>Development facts and accounting</li><li>Market efficiency: the miracle of free markets.</li><li>Why markets may fail?</li></ul>			

- Different approaches: Sachs versus Easterly
- Hall and Jones (1999) and Caselli (2005)

## 2 Agriculture productivity gap

- Gollin, Lagakos, Waugh (2014)
- Adamopoulos and Restuccia (2014)

## 3 Resource misallocation across and within countries

- Caselli and Feyrer (2007)
- Hsieh and Klenow (2009)
- Restuccia and Rogerson (2013)

## 4 Resource misallocation in China

- Adamopoulos et al (2017)
- Liu and Zhao (2021)

## 5 Contract enforcement and property rights

- Greif (1993)
- Rauch and Trindade (1999)
- Hornbeck (2010)
- Acemoglu and Johnson (2005)

## 6 China's Economic Reforms

- Reading: The Logic of Market (by Zhang Weiyang 张维迎)

## 7 Group presentation: Does industry policy work?

## 8 State Capacity and Taxation

- Muralidharan and Sukhtankar (2016)
- Mayshar, Moav, Neeman, and Pascali (2015)
- Besley and Persson (2014)
- Liu (2018)
- Fisman and Wei (2004)
- Dina Pomeranz (2015)

## 9. Government Debt and Infrastructure Financing

- TBA



## 10 Corruption

- Shleifer and Vishny (1993)
- Treisman (2000)
- Fisman (2001)
- Olken and Barron (2009)

## 11 Economic Inequality

- Karabarbounis and Neiman (2013)
- Song, Price, Guvenen, Bloom, and Wachter (2019)
- Piketty, Li, and Zucman (2019)
- Reading: Piketty (2013)

## 12. Final exam

### **The design of class discussion or exercise, practice, experience and so on:**

Class participation is highly recommended. Students are encouraged to share their thoughts or current works in class.

### **Grading & Evaluation:**

Each student is evaluated based on three parts: class discussion, two problem sets, one group presentation, and a final exam.

<b>Evaluation</b>	<b>% of Final Grade</b>
1. Class discussion	10%
2. Problem sets	20%
3. Group presentation	20%
4. Final exam	50%

#### **1. Class Discussion (10%):**

Our TA will take attendance. Students are expected to actively participate in class discussion and share your perspective.

#### **2. Homework (20%):**

##### Homework 1: Replication and a 1-page report (10%)

Follow the steps in Caselli and Feyrer (2007) and compute the marginal product of capital for countries around the world. We replicate Figure V of the paper. Students should submit **a report** that contains the main findings and conclusion (**1 page**).

##### Homework 2: Documentary watching and a 1-page report (10%)

Documentary 1: 走进大凉山

Documentary 2: China's war on poverty

What should we do to make our poverty reduction sustainable?

### **3. Group presentation (20%):**

Industry policy typically refers to the effort of the government (many times in a strategic way) to promote the development of certain industries. For example, "Made in China 2025" is a strategic move of the Chinese government to promote the high-tech industries in China.

Although you often hear about such government plan or support in many countries, not only in China, it is a highly debatable topic. While some believe that the government can set the right targets and follow steps to accelerate the growth of certain industries, others believe that the government is incapable to do so as it does not have the right information or knowledge -- what it often does ranges from only cherry picking the already winners to creating outright economic distortions.

From a layman's perspective, the economic growth during Bismarck's rule in Germany and the economic miracle of Singapore under Lee Kuan Yew's vision and governance often suggest that industry policy can be very effective. Indeed, poor countries may be able to design the right policies as they observe the development paths of the rich countries, and following the foot print of the rich countries may sound a sensible strategy. For a rich country, however, it is unclear what the right strategy and the right policy is as rich countries often rely on innovations for economic growth and such breakthroughs may not be perceivable by the government.

Well, it's up to our judgement whether industry policy works. In recent years, the United States is considering adopting industry policies to compete with China, which is unprecedented. That is the reason why I want you to think about this issue. I hope you can all find a good industry policy to discuss and offer a careful analysis. I look forward to your talk.

### **4. Final exam (60%):**

7 true/false questions, 7 multiple-choice questions, and 3 essay questions based on the reading (based on 7 papers that I will announce).

### **Teaching Materials & References:**

See in Course Schedule