1. 课程简介（100 字左右，最好是中英文）

This graduate course provides an introduction to FinTech including topics such as blockchain and cryptocurrencies. Students are expected to develop a broad understanding of the recent FinTech development and its impact in the financial industries especially through mutual fund and hedge fund investment. Topics may include but are not limited to: blockchain and cryptocurrencies, Bitcoin, Ethereum, and mutual funds investment. After successfully completing this course, students will be able to understand recent FinTech developments and describe the technologies underlying cryptocurrencies and blockchains and make investment through managed funds.

本研究生课程主要讲授金融科技导论，内容包括区块链和加密货币等主题。本课程帮助学生们广泛了解金融科技的最新发展及其通过共同基金和对冲基金投资对于金融行业的影响。主题可能包括但不限于：区块链和加密货币、比特币、以太坊和共同基金投资。成功完成本课程后，学生将能够了解金融科技的最新发展进程，描述加密货币和区块链的基础技术，并通过托管基金进行投资。

2. 课程大纲（英文）

Week	Topics
1	**Introduction to FinTech and Cryptocurrencies 1**: We will discuss recent developments and major areas in FinTech including Blockchain and Cryptocurrency Technologies through Bitcoin.
2	**Introduction to FinTech and Cryptocurrencies 2:** How Bitcoin works, how to do transaction. Mining, Hash Functions, Merkle Tree
3	**Bitcoin and Other Cryptocurrencies 1**: Ethereum and Other Altcoins. Exchange Markets
4	**Bitcoin and Other Cryptocurrencies 2:** Regulation, Central bank, monetary policy and Liquidity.
5	Group presentation and discussion
6	**Investment of cryptocurrencies** Mutual fund is an investment vehicle made up of a pool of money collected from many investors for the purpose of investing in securities including cryptocurrencies. Mutual fund investment, Mutual fund characteristics, Mutual fund performance, Mutual fund manager skill.
7-8	**Further Fintech topics** The FinTech industry is the availability of “big data.” What does big data mean and how do companies analyze it? Machine Learning, Partial Least Square, Research topics, Liquidity in Cryptocurrency market and Commonalities across Anomalies

3. 教师简介（中文，如有英文版也请提供）

姜磊副教授于 2011 年入职清华大学经济管理学院金融系。其学术研究领域包括实证资产定价，投资学和金融科技。具体地说，以公募基金，股票和加密数字货币作为研究对象，应用金融计量，机器学习等方法对于资产的期望收益，流动性等重要性质进行解释和预测。

Jiang Lei (Associate Professor) joined the Department of Finance in School of Economics and Management at Tsinghua University in 2011. His academic research fields include empirical asset pricing, investment and Fintech. Specifically, he study mutual funds, stocks and cryptocurrency based on Financial Econometrics, Machine Learning and other methods to explain and predict the expected return, liquidity and other important properties of the assets.

4. 教师证件照片（用于宣传使用）