# **Economics 335 – Money and Banking**

Instructor: Xinyu Hou hou.xinyu@wustl.edu

We will meet every weekdays from 11:00AM to 12:45PM, Jun. 11 - Jul. 13, Seigle 305.

My office is Seigle Hall 354, and my office hours are right after class. It would be good to send me an E-mail if you want to meet me outside of the regular office hours.

# Scope of the course

This is an introduction course to the money and banking theory, for those who wants to understand economic analysis in monetary and financial systems. By saying "understanding" I mean the development of economic intuition to organize concepts and facts, and then by acquiring basic analytical tools we can possibly evaluate events and financial issues. We will start by focusing on historical natures of money, with minimum but necessary mathematical tools, to think critically and logically how things evolve to the complicated modern system as it is now. It would be better if you know basic economic principles and some level of accounting (balance sheet and double-entry bookkeeping); but no worry if not, and we are going to learn something about that, which could be very useful.

We are also going to use one or two classes to master some technical aspects like present value, discounting and interest rates. To understand the banking system, we would trace back to the beginning when early banks first appeared, in the west, in India, as well as in ancient China; then the modern banks in the European Late Middle Ages. Next we will forward to the question of how central banks appear and through what mechanism they are implementing monetary policies, and hopefully we could take a little bit grasp of what could possibly happen given different states of the economy.

The scope would be adjusted according to your current knowledge and understanding of economics. You are always welcome to express your doubts, and bring suggestions and additional issues to the forefront.

#### Textbooks and materials:

- 1) Glenn, R. Hubbard, Money, Banking and the Financial System, Pearson, 3rd Edition
- 2) Lecture Notes from instructor
- 3) (Not required) Frederic Mishkin, "The Economics of Money, Banking, and Financial Markets," 11<sup>th</sup> Edition, Addison-Wesley

#### **Grading:**

Your grade will be determined by two non-cumulative in-class exams, class participation, and everyday homework assignments (only one question for a day, 20 in total). The maximum number of points in the course is 100. Exams 1 and 2 are worth 25 points each. Class participation is worth 20 points. The homework assignments are worth 1.5 points each. The first assignment will be handed out on the first day of class and due on the third day, so that you have two days to think and write down the answers.

Hand in your homework assignments to the instructor every day before class starts. You may discuss the assignments with your classmates about the homework, but please write your own solution.

#### Exams:

- 1) Midterm, Wednesday June 27th, in class. (Review session on June 26th)
- 2) Final exam, Friday July 13<sup>th</sup>, in class. (Review session on July 12<sup>th</sup>)

#### Academic integrity:

You are held to the standards of academic integrity established by Washington University and your individual college. In particular, evidence of cheating on an exam will result, initially, in a failing grade on the exam, and immediate academic disciplinary action. If you ever feel that these standards of academic integrity are not being met, please notify me or an undergraduate advisor immediately. If you are uncertain about the policy on academic integrity at Washington University, refer to weblink. For the College of Arts & Sciences' students, the latter is published each semester in the Course Listings booklet.

# Course Outline and Reading Suggestions

### Week 1 (6/11-6/15):

- A first look at the "theory of money"
  - The many things called "Money" in history and today why we care. Why they are so different from other traded commodities?
  - The mystery of fiat money
- Hubbard Chapters 1,2;
- Lecture Notes 1:
- https://en.wikipedia.org/wiki/History of money
- Breaking down the many concepts
  Interest rates, discounting, rate of returns, net present value...bonds, securities, assets, liabilities and other basic financial and monetary concepts.
- · Hubbard Chapters 1, 2 and 3;

• Lecture Notes 2

#### Week 2 (6/18 - 6/22):

- Breaking down the many concepts (continue).
- Hubbard Chapters 1, 2 and 3;
- Lecture Notes 2
- The many things called "bank" in history and today. The role of banks and of fractional banking in the creation of money and credit.
- Lecture Notes 3
- · https://en.wikipedia.org/wiki/History of banking,
- https://en.wikipedia.org/wiki/History of banking in the United States
- Let's play with data (homework)

#### Week 3 (6/25 - 6/29):

- Money supply: Inflation according to the Quantity Theory of Money. Money, Debt and the Government Budget Constraint. The Federal Reserve and money supply process
- Hubbard, Chapter 13,14;
- Lecture Notes 4:
- <a href="https://en.wikipedia.org/wiki/Money\_supply">https://en.wikipedia.org/wiki/Money\_supply</a>
- <u>http://www.frbsf.org/education/teacher-resources/datapost/macroeconomics/money-supply/</u>
- https://www.federalreserve.gov/fags/money-rates-policy.htm

## **Exam 1** Wednesday June 27<sup>th</sup>, 1 hour in class. (Review session on June 26<sup>th</sup>)

- Term structure of interest rates, complete market.
- *Hubbard, Chapter 5;*
- Lecture Notes 5:

#### **Week 4** (7/2 - 7/6, no class on 7/4):

- Transaction costs, asymmetric information and moral hazard what could go wrong inside the financial institutions
- *Hubbard, Chapters 4, 5, 6, 9 and 10;*
- · Lecture Notes 6.
- Basic Economics of Banking. Commercial Banks, Investment Banks, Shadow Banking and Nonbank Financial Institutions.
- · Hubbard Chapters 10 and 11;
- · Lecture Notes 7;

- https://www.newyorkfed.org/research/staff\_reports/sr559.html
- https://www.brookings.edu/wp-content/uploads/2010/09/2010b bpea gorton.pdf

# Week 5 (7/9 – 7/13): Breaking down financial crisis

- Bank runs and the original role of central banks. How financial crisis occur, most of the times
- · Hubbard, Chapters 12;
- · Lecture Notes 8,9.

Exam 2 Friday July 13th, in class. (Review session on July 12th)