

# 73-338: FINANCIAL CRISES AND RISK Prof. Ariel Zetlin-Jones

E-mail: azj@cmu.edu Class Web: Canvas Office: TPR 5141 Office Hours: T 10:00AM - 12:00PM Class Times: MW 10:30AM - 11:50AM Classroom: TPR 2612

#### **Course Description:**

This course provides an in-depth examination of the causes of financial crises as well as what governments can do to prevent them or at least reduce their cost. The course is designed to to provide an understanding of individual attitudes towards risk and individual decision making about savings and investment under uncertainty, and to use this understanding to evaluate the various economic roles played by financial institutions in helping individuals manage risk, especially those roles which may lead to economic instability and crises. In addition, the course may cover bubbles and swindles, especially when these spillover to the broader macroeconomy; the role of information in banking in normal times and in bank runs; crisis resolution techniques; and the extensive history of attempts to improve regulation so as to reduce the frequency and cost of crises.

#### Learning Objectives:

At the end of this course, students should be able to...

- 1. ...identify key regularities that characterize the amount of risk in the macroeconomy as well as the market price of risk;
- 2. ...use microeconomic tools and models to confront macroeconomic evidence on risk;
- 3. ...understand the various roles played by financial institutions and how these roles create key forces which may lead to instability in financial markets and the macroeconomy;
- 4. ...recognize how these models inform our understanding of what policies are particularly useful in managing financial crises.



#### Prerequisites:

Formal: 73-100 or 73-150, 73-240 and 21-256 or 21-259.

Informal: Also, you may find it useful to have your slides from 73-240 on hand.

#### **Course Material:**

*Textbook:* I will make available a set of lecture notes that will serve as our textbook. Some of our course material will draw upon material from the following outsides sources, but none of these sources will be used extensively enough to warrant you purchasing it. Some of the books I will refer to are the following:

- 1. Macroeconomics, 5/E, Stephen D. Williamson, ISBN: 978-0132991339;
- 2. Understanding Financial Crises, Franklin Allen and Douglas Gale, ISBN: 978-0199251421.

In addition, on the Canvas website I will make available journal articles that will be discussed in class.

*Slides:* I will make slides available on the class website. However, I have decided to not make the slides available before class. This is done to encourage discussion during class. In particular, not posting slides before classes allows me to ask questions that might otherwise be answered by looking at the next slide. This should also help to encourage you to read the course lecture notes in advance.

*Twitter:* Professor Ales maintains the CMU Macro twitter feed. He posts a broad range of macro-relevant news and I will highlight those most relevant for our class. The twitter feed is @cmu\_macro.

## Feedback, Email, and Office Hours:

Please send questions to our course Piazza forum (accessible through Canvas). You should expect a response no sooner than 2 hours after you post a question and no later than 24 hours after you post a question (but typically much sooner). Given high volumes, expect delays just before homework is due. Office hours are scheduled for Tuesday between 10:00am and 12:00pm. I am also happy to schedule additional office hours by appointment. If your question is brief you can stop by anytime, my door is (almost always) open!



## **Requirements and Grades:**

*Final Grade:* The final grade will be computed according to the following components:

- Homework (30% of total grade)
- Midterm (20% of total grade)
- Class presentation & group work (10% of total grade)
- Class Discussion and Write-Up (10% of total grade)
- Comprehensive final (20% of total grade)
- Class participation (10% of total grade)

Final grades will be determined on a relative basis: students with the highest total points will receive A's, those next in line will receive B's, etc. I will not disclose cutoff values.

*Class Discussion:* In-class discussion, based on an assigned reading, will be an important element of our class. Discussions will occur mostly at the beginning of each week. The goal will be to introduce the key topics and trade-offs that will be covered. Students will be assigned to lead discussion each week. You will also be asked to submit a brief (1 page) written summary of your discussion.

*Class Presentation and Group Work:* About 6 weeks into the semester, I will organize the class into groups. Each of these groups will select a topic and be asked to examine a specific financial market or type of financial institution, the economic role of this market or institution, and how this market or institution mitigates or contributes to micro- or macro-economic risk. At the end of the semester you will be asked to present your findings in front of the class. The presentation will be made by groups of 4 or 5 people. Ideally, a presentation should last for 15/20 minutes. For a presentation to be successful, the group will have to display in-depth knowledge of their chosen topic. Also, the group will have to display how the tools learned in the semester have been used in the work presented.

## Fine Print:

1. If you have a disability and have an accommodations letter from the Disability Resources office, I encourage you to discuss your accommodations and needs with me as early in the semester as possible. I will work with you to ensure that accommodations are provided as appropriate. If you suspect that you may have a disability and would benefit from accommodations but are not yet registered with the Office of Disability Resources, I encourage you to contact them at access@andrew.cmu.edu.



- 2. Absences: you will be excused for any class missed for reasons connected to job-search. Just let me know.
- 3. Classroom behavior: Private conversations, browsing the web and checking email will be considered inappropriate. If you do it, you will be cold called. If you do it repeatedly, it will impact your participation grade.
- 4. Final score regrading: any regrading request must be submitted to the economics program at the conclusion of the fall semester.
- 5. Class Material: I will provide lectures notes, slides etc. These materials are subject to copyright and are being provided for the personal educational use by students enrolled in this course. Any other use, including further reproduction and distribution of the materials (whether in hard copy or electronic form) is strictly prohibited. For example, you may not copy any of these materials and upload them to any other web sites without the prior permission of the applicable copyright holder.

#### Finally:

Take care of yourself: Do your best to maintain a healthy lifestyle this semester by eating well, exercising, avoiding drugs and alcohol, getting enough sleep and taking some time to relax. This will help you achieve your goals and cope with stress.

All of us benefit from support during times of struggle. You are not alone. There are many helpful resources available on campus and an important part of the college experience is learning how to ask for help. Asking for support sooner rather than later is often helpful.

If you or anyone you know experiences any academic stress, difficult life events, or feelings like anxiety or depression, we strongly encourage you to seek support. Counseling and Psychological Services (CaPS) is here to help: call 412-268-2922 and visit their website at

#### http://www.cmu.edu/counseling/

Consider reaching out to a friend, faculty or family member you trust for help getting connected to the support that can help.



## Schedule and Course Outline

The following is a tentative outline of each lecture (note that an individual lecture does not always overlap with an individual class).

#### Part I

- Lecture 1: Introduction. Consumption and Savings.
- Lecture 2: Attitudes towards Risk. The Cost of Business Cycles.
- Lecture 3: Choice Under Uncertainty. Portfolio Choices.
- Lecture 4: Financial Market Prices and Risk.
- Lecture 5: Risk Sharing.

## Part II

- Lecture 6: Liquidity and Banking
- Lecture 7: Banking Panics and Policy
- Lecture 8: Case Study: Cryptocurrency
- Lecture 9: Information and Crises
- Lecture 10: Case Study: Tulip Bubbles
- Lecture 11: Bubbles



| Week | Monday               | Wednesday                     |
|------|----------------------|-------------------------------|
| 1    | (Aug 27)             | (Aug 29)                      |
|      | Lecture 1            | Lecture 1                     |
| 2    | (Sep 3)              | (Sep 5)                       |
|      | No class - Labor Day | Lecture 2                     |
| 3    | (Sep 10)             | (Sep 12)                      |
|      | Lecture 2            | Lecture 3                     |
| 4    | (Sep 17)             | (Sep 19)                      |
|      | Lecture 3            | Lecture 4                     |
| 5    | (Sep 24)             | (Sep 26)                      |
|      | Lecture 4            | Lecture 4                     |
| 6    | (Oct 1)              | (Oct 3)                       |
|      | Lecture 5            | Lecture 5                     |
| 7    | (Oct 8)              | (Oct 10)                      |
|      | Lecture 5 / Review   | -Midterm-                     |
| 8    | (Oct 15)             | (Oct 17)                      |
|      | Lecture 6            | Lecture 6                     |
| 9    | (Oct 22)             | (Oct 24)                      |
|      | Lecture 7            | Lecture 7                     |
| 10   | (Oct 29)             | (Oct 31)                      |
|      | Lecture 8            | Lecture 8                     |
| 11   | (Nov 5)              | (Nov 7)                       |
|      | Lecture 9            | Lecture 9                     |
| 12   | (Nov 12)             | (Nov 14)                      |
|      | Lecture 9            | Lecture 10                    |
| 13   | (Nov 19)             | (Nov 21)                      |
|      | Lecture 11           | No class - Thanksgiving Break |
| 14   | (Nov 26)             | (Nov 28)                      |
|      | Lecture 11           | Class Presentations           |
| 15   | (Dec 3)              | (Dec 5)                       |
|      | Class Presentations  | Review                        |

Here is the schedule for the semester: