ECO349H1F – Money, Banking, and Financial Markets

Dept. of Economics, University of Toronto, Prof. Tyler Paul Sections L0101 and L0201, Fall 2023

Course Quercus

https://q.utoronto.ca/courses/311222

Course Description

This course provides an economic analysis of money, financial institutions and markets, central banks, and their interrelations. We will study how modern financial systems allocate resources to productive uses. Central to this analysis is understanding the role of money, the determinants of interest rates, as well as the information asymmetries at the heart of financial transactions. We will also describe the causes of financial crises and the efforts to contain and prevent the systemic damage they can cause. Finally, this course scrutinizes the monetary policy tools of the central bank and tracks their evolution over time.

Learning Objectives

This course has six key learning objectives:

- 1) Describe the key players in modern financial markets and understand their structure and operating incentives
- 2) Assess the market forces which determine interest rates for financial assets and how these link to real economic activity
- 3) Analyze the importance of household debt in precipitating and intensifying economic downturns
- 4) Identify the causes of financial crises, the impact on the business cycle, and the similarities across historic episodes
- 5) Evaluate the responses of policy makers to crises and the recent successes or failures of newly-introduced tools
- 6) Develop familiarity with real-world events and data by practicing statistical analysis and written communication

Course Delivery

This course will be taught **fully in person** at the St. George campus. We will meet weekly for a two-hour lecture and a one-hour tutorial:

Lectures

- o L0101 meets Mondays, 10am-12pm in the Al Green Theatre
- o L0201 meets Mondays, 2pm-4pm in WI 1016

<u>Tutorials</u>

- o L0101 meets Mondays, 12-1pm in the Al Green Theatre
- L0201 meets Mondays, 4-5pm in WI 1016

Lecture attendance is mandatory and forms part of your course grade (see below for details). During lectures I will present core course material from the textbook, review papers and research articles, analyze data, as well as work through practice problems with you. Lectures will be recorded and posted online to Quercus (with a delay) to help you review while studying. All exams will be **in person**, while other forms of assessment will be delivered **online** through Quercus and/or Crowdmark.

TAs will lead tutorials by reviewing lecture material, solving new practice problems step-by-step, and answering any questions you may have. Tutorial attendance is optional but *strongly* recommended. Students who attend tutorials tend to perform significantly better than students who do not.

Required Textbook

The Economics of Money, Banking, and Financial Markets, Canadian Edition, by **Frederic S. Mishkin and Apostolos Serletis, 8th edition.** The text is available as an eBook through the U of T bookstore. We will be using the book extensively so ensure you have access to a copy. Please do not use older editions, as the content has changed significantly.

Technology Requirements

To access course materials and submit assignments you will need internet access. To receive inclass participation points you will need to purchase an iClicker account, either from the website or the app: <u>https://student.iclicker.com/#/login</u>. This account will be active for 6 months and can be used for all of your classes. **You may use a previously-purchased iClicker remote.** To register your used iClicker remote for our class and avoid paying fees, make sure you **register on Quercus, not the iClicker website**. Once registered you may link your remote to the iClicker app and use that instead, so you no longer need to bring the remote each week. For details on how to register your iClicker remote: iClicker support

https://teaching.utoronto.ca/resources/student-support/

Office Hours

I will hold in-person office hours on **Fridays from 1-2:30pm in room 346** of the Department of Economics. I will also hold virtual office hours on Zoom on **Tuesdays from 10-11am**. You can find the link on Quercus. If these times are not well attended I may adjust them to ensure more students have access. The TAs will hold in-person and virtual office hours on a rotating schedule. Please see the schedule posted to Quercus for exact times, dates, and locations.

Communication

I will post course announcements to Quercus, which will automatically email your U of T address by default. Make sure your notification settings allow announcements to be forwarded to your email. You are responsible for reading all announcements.

Questions relating to course logistics and administration should be directed to the course inbox (address forthcoming). This inbox will be monitored by Economics department staff who can answer any queries regarding scheduling, assignment due dates, accommodations, etc. If they are unable to help you they will forward your request directly to me.

If you have a personal matter you wish to discuss privately with me please reach me at <u>tyler.paul@utoronto.ca</u>. I will not answer content or general course questions at this address. You can expect a reply within three business days of emailing me.

Questions relating to course content are best answered during class, tutorials, or in office hours. Otherwise, you may use the following online options:

- 1) **Piazza:** this online discussion board can be accessed through a link on Quercus. Piazza allows you to post questions (anonymously if you prefer) to your classmates and the TAs. If you know the answer to another student's question feel free to reply, and the TA will mark your answer as correct if they agree. The board will be monitored daily by a TA and myself, and we will answer as many questions as we have time to each day. However, due to the size of the class we may be unable to answer every new question as they come up. Please wait 48 hours before re-asking a question if it hasn't been answered yet.
- 2) **Discord:** I have created a class Discord server that should be used for informal discussion about the course. Questions on Discord will not be answered by the TAs; it is mainly a tool for you to connect with your fellow classmates. Past students have used Discord to ask simple questions (e.g. "where's the final exam again?"), form virtual or in-person study groups, or review practice problems together. I expect you to make the server a welcoming environment to all students. We will moderate the discussion to ensure it meets university guidelines. If the server is misused I reserve the right to close it at any time.

Assignment	Weight	Due date
Class participation (12)	5%	Every lecture
Weekly homework (11)	25%	Every Sunday at 11:59pm
Writing Project	10%	20 November
Midterm exam	25%	30 October (during tutorial)
Final exam	35%	Final exam period

Grades, Assignments, and Important Dates

Class Participation

During each lecture I will ask you to answer several questions regarding the material using the iClicker app. Fully responding to **the majority of questions** during lecture will earn participation credit for that day worth $\frac{1}{2}$ % of your overall grade. Occasionally missing a question due to using the restroom, phone problems, etc. will not lose points unless it becomes a pattern across several lectures. I will **automatically drop two classes** from your participation grade, which means you only need to participate **in 10 lectures** to receive full credit. Participation in more than 10 lectures will not earn any points.

If you encounter technical difficulties during a lecture and believe your responses were not sent, you must **speak with me after class or email me ASAP**. You are responsible for checking

your Quercus grades to ensure you received participation for each class. The gradebook will be updated within 48 hours of lecture. You have **four days following lecture** to file any claims that the technology failed.

Weekly homework assignments

Every week after lecture I will post a homework assignment that will be **due the following Sunday at 11:59pm**. Each assignment will be worth 2.5% of your overall grade. I will **automatically drop your lowest** assignment. There will be **no extensions or regrade requests** for the homework. Late submissions received within 24 hours of the deadline will suffer a 50% point penalty. Beyond 24 hours from the due date any submission will receive zero points.

The purpose of these assignments is to give you more practice with the course material before the midterm and final so you can identify any gaps in your understanding. They will also connect course content to real world events. You are not allowed to collaborate with classmates or use any external tools (e.g. generative AI). You may use your textbook or other provided readings.

Writing Assignment

Halfway through the semester I will ask you to write a short paper. The objective is to get experience working with real data and apply course concepts to current events. To do well on this assignment you must demonstrate superior knowledge and economic analysis compared to someone who has not taken a course in financial markets. The best way to do this is reference lessons from class.

The assignment will be worth 10% of your overall grade. You may discuss the assignment with your classmates, but **you must submit your own work.** You may not use generative AI for this assignment in any way. I will publish more details three weeks before the due date. **The due date cannot be extended.** Late assignments will receive a penalty of 20 percentage points per 24 hours after the due date, so after five days the assignment will be worth zero points. There will be no make-up assignment if you fail to submit on-time.

Midterm and Final Exams

There will be one midterm exam halfway through the course, worth 25%, and one final exam worth 35% during the Fall final exam period. The midterm will be held during regular class hours (half of the time will be devoted to new content). **For section L0101, the midterm will be held in a new location (TBD).** Both exams will be closed book. I will post more details about both exams as we approach them.

Regrade Requests for Midterm and Writing Assignment

Regrade requests must be submitted online through the MS Form provided on Quercus. You have **two weeks following the due date** to submit a regrade request. After two weeks we will not honor any regrade requests. Once submitted your entire assignment will be regraded, and your new score could be higher, lower, or the same.

Missing Midterm Due to Unforeseeable Events

Under normal circumstances, the failure to take the midterm during the designated time will result in a zero for that exam. On rare occasions we will grant special accommodations due to illness, injury, legal issues, personal/family problems, extracurricular conflicts, religious practices, accessibility concerns, or other unusual and serious situations. Missing the midterm due to, for example, sleeping through your alarm or working late at a job will not receive special accommodations.

In order to be considered for the potential make-up exam **you must alert me as soon as you know** you will be unable to attend class. In most cases this must be **before the exam**. I will only consider granting a make-up exam for students who contact me after missing the exam if their situation would reasonably prevent them from contacting me sooner.

To inform me of your inability to attend the exam and to request a make-up, please complete these steps:

- 1) Obtain **one** of the following pieces of documentation to verify your absence:
 - i. Absence declaration form via ACORN
 - ii. Verification of Illness or Injury Form (VOI)
- iii. College Registrar's letter
- iv. Letter of Academic Accommodation from Accessibility Services
- 2) Complete the Missed Term Test form on Quercus and attach your documentation from the previous step. The date at which this is submitted will be used when considering your request. When explaining your absence, you may provide as much detail as you feel comfortable, but **you are not required to reveal anything personal**. If your absence involves a deeply private issue, please seek guidance from your College Registrar first about how to communicate with me.
- 3) One week after submitting the Missed Term Test form you will receive an email from me that will either: approve your request for a make-up exam; ask for more information; or deny your request. If you feel you I have not treated your request fairly you may contact your College Registrar to mediate.

The above steps **must be followed** to receive consideration. Additionally, you are welcome to contact me via email or in office hours to further discuss your absence, but this is not required. You should also review the Arts and Sciences specific policy details here: <u>https://www.artsci.utoronto.ca/current/academics/student-absences</u>

Note, the Absence Declaration form can only be used once per academic term (e.g., once per the fall term, not per course) and up to seven consecutive days. If other subsequent issues arise, then you will need to provide other forms of recognized documentation (e.g., Verification of Illness Form, College Registrar's Letter, or a Letter of Academic Accommodation from Accessibility Services).

There will be **one make-up midterm exam** scheduled sometime before the end of the Fall semester (prior to the final exam period). There will be **no other make-up exams scheduled.** If you miss the midterm and the make-up you will receive a zero for that portion of

the course. If you anticipate that may happen please contact your College Registrar as soon as possible to discuss your academic plans.

If you are facing significant difficulties in attending class or completing assignments that continue for longer than a week you should contact your <u>College Registrar</u> immediately for assistance.

Use of Generative AI for Assignments (ChatGPT)

You may not copy or paraphrase from any generative artificial intelligence application, including ChatGPT and other AI writing assistants, for the purpose of completing any assignments in this course. Use of generative AI for this assignment may be considered use of an unauthorized aid, which is a form of cheating. The objective of the writing assignment is to give you experience with data and effectively communicating your own ideas based on what we've discussed in class. These skills are highly desired for most jobs that Economics majors seek upon graduation, like consulting, financial advising, or policy work. Failure to practice writing by relying on ChatGPT will harm your career prospects.

Notice of Crowdmark

This course will use Crowdmark, a collaborative online grading tool for marking and providing feedback on graded term assessments. Crowdmark provides efficiencies with grading, data recording, returning term assessments and handling regrade requests. Copies of student work marked in Crowdmark, including grading and feedback, will be available online to students for at least one year. Digital (i.e., online) copies will serve as the authoritative record for course administrative purposes, and paper copies of assessments scanned and uploaded to Crowdmark will be destroyed after the term has ended and final grades are approved. If you have questions about how your information is stored on Crowdmark, please contact me via email.

Notice of Lecture Recordings

This course, including your participation, will be recorded on video and will be available to students in the course for viewing remotely and after each session. Course videos and materials belong to myself, the University, and/or other sources depending on the specific facts of each situation and are protected by copyright. Do not download, copy, or share any course or student materials or videos without my explicit permission. For questions about the recording and use of videos in which you appear, please contact me via email.

Accessibility, Inclusion, and Support Resources

Students with diverse backgrounds, perspectives, learning styles and needs are welcome in this course. I want the classroom to be an open and welcoming environment where everyone feels comfortable to raise their hand and speak. If you feel there are things I could do better to improve the inclusion in the classroom please let me know.

Additionally, the university provides a variety of support services for students:

• For course catalog questions including prerequisites, please contact the Department of Economics <u>undergraduate administrator</u>.

- If you require accommodations for a disability or health concern please visit the <u>Accessibility Services Office</u>. You can register your needs with <u>Accessibility Services</u>.
- For resources to promote your academic success, visit the <u>Academic Success Centre</u>.
- The university provides all students with free 24-hour access to the <u>UofT Telus Health</u> <u>Student Support</u> line. You can confidentially speak with a counsellor about any mental health or life issues affecting you, or set-up an appointment for ongoing support. This is a fantastic resource; I suggest using it early, before the stress of the semester piles up, so that you will be more confident to face future challenges.
- For long-term issues that are impacting your academics, contact your <u>College Registrar</u>.

Academic Integrity

Academic integrity is central to a UofT education. We take academic integrity very seriously, and so should you. As a member of the university community you have committed to act with honesty, trust, fairness, respect, responsibility and courage in all academic matters. No student plans on violating this commitment at the initially, but . Most academic integrity violations occur due to circumstance: fast-approaching deadlines, falling behind in work, worrying about poor performance, or anything that causes stress. In these cases, cheating is **not** the easy way out. Not only do you cheapen the time you spend here, but the risk of failing the class and setting back your academic progress is extremely high. To avoid making an academic integrity violation, follow these guidelines:

- **Do your own work**. We design course work to develop and assess skills useful in upper-level courses and the job market. You lose a valuable opportunity to develop these skills and lower the value of the UofT brand when you cheat.
- **Properly acknowledge other people's ideas**. You'd want the same for your ideas.
- **Ask if you are unsure**. I have tried to be clear about the resources and potential for collaboration allowed on each assignment. If you are still unsure after reviewing the syllabus, please ask me. Being unsure of what constitutes an academic integrity violation is not an excuse, and will still be fully report to the Department of Economics and the Office of Student Academic Integrity.
- Normally, students will be required to submit their course essays to the University's plagiarism detection tool for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (*https://uoft.me/pdt-faq*).
- Read the University of Toronto's Code of Behavior on Academic Matters (<u>https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity</u>).

Statement of Positive Encouragement

Here are three ideals that I strongly believe can improve your university experience.

1) This class (and all others) should be enjoyable and fun.

Congratulations on making it this far in your academic career. You now have the luxury of studying topics that you personally find interesting. That's awesome! Enjoy this time, and have fun soaking up as much knowledge as you can.

2) You absolutely will succeed if you believe you can.

A necessary condition for ensuring your success is to believe in yourself. Your acceptance into U of T indicates you have the capacity to do well, but more important is envisioning yourself achieving your goals. Taking ownership of your learning with confidence is a great way to get the most out of this course.

3) Your professor and TAs are on your team.

You're not alone! We are here to help you – our goal is to develop capable and learned members of society. We've all been in your shoes before, so we know the types of challenges you may face. Don't be afraid to ask for help.

Topics Outline

Below is a tentative sequence of topics we will cover. The actual order and material covered may differ throughout the semester. Additional readings will be regularly posted to Quercus.

Topic	Chapter	Description	
Introduction	1-3	Why Study Money, Banking and Financial Markets; Overview	
		of the Financial System; What is Money?	
Financial Markets and	4	The Meaning of Interest Rates	
	5	The Behaviour of Interest Rates	
Interest	6	The Risk and Term Structure of Interest Rates	
Rates	7	The Stock Market, Theory of Rational Expectations, and	
		Efficient Market Hypothesis	
Financial	8	Economic Analysis of Financial Structure	
Institution	12	Banking and the Management of Financial InstitutionsRisk Management with DerivativesEconomics Analysis of Financial Regulation	
Management,	13		
Regulation,	9		
and Crises 11		Financial Crises	
Monetary Policy Theory	16	Tools of Monetary Policy	
	17	The Conduct of Monetary Policy: Strategy and Tactics	
	26	Transmission Mechanisms of Monetary Policy	
International	13	The Foreign Exchange Market	
Finance	14	The International Financial System	