ECO349H1F – Money, Banking, and Financial Markets

Dept. of Economics, University of Toronto, Prof. Tyler Paul Sections L0101 and L0201, Fall 2024

### **Course Quercus**

https://q.utoronto.ca/courses/357608

#### **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 examines the transmission mechanisms of monetary policy and how they have changed over time.

#### **Learning Objectives**

This course has six key learning objectives:

- 1) Describe the structure and operating incentives of key financial institutions
- 2) Illustrate the role of asymmetric information in shaping financial markets and the regulatory environment
- 3) Analyze the market forces which determine interest rates for financial assets and how these link to real economic activity
- 4) Explain the common causes of financial crises and their potential impact on the business cycle while evaluating the responses of policy makers over time
- 5) Assess the fragility of the banking system using a theoretical economic model
- 6) Explore the various channels through which monetary policy affects the real economy and determine their relative strengths

### **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

- L0101 meets Mondays, 11am-1pm in FE 114
- o LO201 meets Mondays, 3pm-5pm in BA 1170

<u>Tutorials</u>

- L0101 meets Mondays, 10-11am in FE 114
- o Lo201 meets Mondays, 2-3pm in BA 1170

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 to help you review while studying. Due to the Thanksgiving holiday on Monday, October 14<sup>th</sup>, we will hold an additional required lecture on Tuesday, December 3<sup>rd</sup>. I will provide details regarding the time and location later.

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, 8<sup>th</sup> edition.** The text is available as an eBook through the U of T bookstore.

#### **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>.

You must use your phone or laptop to access iClicker in class, **not** a physical iClicker remote. If you have previously purchased a physical iClicker remote, you may **register it to your account and avoid paying the subscription fee.** Once registered you will link your remote to the iClicker app and use that instead of the remote. For details on how to register your iClicker remote: <u>https://teaching.utoronto.ca/resources/student-support/</u>

### **Office Hours**

I will hold in-person office hours on **Wednesdays from 11am-12pm in room 346 of the Department of Economics**. I will also hold virtual office hours on **Zoom on Fridays 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. All course material will be posted to Quercus.

All questions regarding course logistics and administration should be directed to the course email account: <u>eco349h1f.a@course.utoronto.ca</u>. This inbox will be monitored by Department of Economics 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 please contact me at <u>tyler.paul@utoronto.ca</u>. I will not answer content or administrative 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. Additionally we will use <u>Piazza</u> as an online discussion board. 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. You can access Piazza through a link in the sidebar on Quercus.

At the end of the term, I will give the top two student answerers on Piazza an extra 2 marks to their course grade. Answerer rankings will be weighted by number of endorsed answers, so students who spam low-effort answers will not rank highly.

Assignment	Weight	Due date
Class participation (9)	5%	Every lecture
Reading quiz (9)	10%	Every lecture
Mini-Midterm	15%	October 7 <sup>th</sup> (during tutorial)
Midterm	30%	November 4 <sup>th</sup> (during class)
Final exam	40%	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  $\frac{5}{9}$ % 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 one class** from your participation grade, which means you only need to **participate in 9 lectures** to receive full credit.

If you encounter technical difficulties during a lecture and believe your responses were not sent, you must **speak with me after class or email the course inbox 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. After four days we will not provide any accommodation for missed participation points.

# **Reading quiz**

At the beginning of each lecture we will have a short quiz based on the assigned reading from the previous week. Each quiz is worth  $\frac{10}{9}$ % of your overall grade. If you answer the **majority of questions correctly**, you will receive 100% for that quiz. Otherwise you will earn 0% for that quiz. The purpose of the quiz is to ensure you read the assigned articles, so quiz questions will not be exceedingly difficult. I expect all students who do the reading to receive full credit on the quiz. I will **automatically drop one reading quiz**, which means you only need to **pass 9 quizzes** to receive full credit.

## **Midterms and Final Exam**

There will be one mini-midterm during week 6 worth 15%, one full midterm during week 10 worth 30%, and one final exam worth 40% during the Fall final exam period. The mini-midterm will be during tutorial time, followed by a full lecture. The full midterm will be held during regular class hours.

## **Regrade Requests for Midterm and Writing Assignment**

Regrade requests must be submitted online through an MS Form which we will be post to Quercus. You have **one week following the date the form is posted** to submit a regrade request. After one week we will not honor any regrade requests. When submitting a regrade request please be as specific as possible regarding why you believe your test deserves more points. Be aware that submitting a regrade request may result in a new score that is higher, lower, or the same as your original score.

# Missing the Midterm Due to Unforeseeable Events

Under normal circumstances, the failure to take the midterm during the designated time will result in a zero. 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 test **you must alert me as soon as you know** you will be unable to attend class. This must be **no later than one week after the midterm**. I will only consider granting a make-up test for students who contact me later than one week if their situation would reasonably prevent them from contacting me sooner.

To inform me of your inability to attend the midterm 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 <u>ACORN</u>
    - When submitting via ACORN, please send the verification email to the course inbox: <u>eco349h1f.a@course.utoronto.ca</u>
    - Note that you may only use one absence declaration per term across all of your courses. If you have already used this declaration, please provide another piece of documentation.
  - 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 Midterm 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 Midterm form you will receive an email from me that will either: approve your request for a make-up; 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>

There will be **one make-up midterm** scheduled sometime before the end of the Fall semester and prior to the final exam period. There will be **no other make-ups 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.

There is no make-up for the mini midterm. If you miss the mini midterm with an approved absence according to the steps above, I will shift the weight towards the midterm and/or final exam.

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.

#### **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>).

# Use of Generative AI for Assignments (ChatGPT)

You are not allowed to use any outside aids, including generative AI, during the in-person assignments (midterm, final exam, or reading quizzes). You are welcome to use generative AI as a learning aid when studying or completing practice problems. Please be aware of the limitations of this technology in general, such as hallucinations and inaccurate information, and for our course specifically. Regrade requests which use answers from ChatGPT, for example, will not be successful.

# **Topics Outline**

Below is a tentative sequence of topics we will cover. The actual order and material covered may differ throughout the semester.

Week	Chapter(s)	Description		
2	1, 3	Why Study Money, Banking and Financial Markets?		
		What Is Money?		
3	2, 8	An Overview of the Financial System		
		An Economic Analysis of Financial Structure		
4	4	The Meaning of Interest Rates		
5	5	The Behaviour of Interest Rates		
6	6	Mini-midterm		
		The Risk and Term Structure of Interest Rates		
7	Thanksgiving – no class			
8	7	The Stock Market, Theory of Rational Expectations, and the Efficient		
		Market Hypothesis		
9	Reading week – no class			
10	Midterm			
11	12	Banking and the Management of Financial Institutions		
12	11	11 Financial Crises		
13	N/A	N/A Diamond-Dybvig model of bank runs		
14	9 Economic Analysis of Financial Regulation			
14	26	Transmission Mechanisms of Monetary Policy		