

Department of Economics
University of Toronto
ECO349H1S (Section L5101)
Money, Banking, and Financial Markets
Summer 2020

Instructor: Chris D'Souza

Email: Use Quercus Inbox tool

Course Description and Topics: This course explores a wide range of topics involving money, financial institutions and financial markets, and the links between the financial sector and the central bank. We examine the importance of banks and other financial institutions in the economy, and how information asymmetries and regulation have shaped their evolution.

Topics surveyed include the role of money and the financial system in promoting economic welfare, the behaviour of bond and stock market prices and investment returns, the role of commercial banks in the economy, and the tools of central banks. This course studies the role of the central bank, which includes its use of monetary policy to affect growth in the Canadian economy. Furthermore, given the high degree of global financial market integration, we also investigate the links between Canada's financial system and the international financial system, in part through exchange rate movements.

Course Organisation – There will be options for both synchronous and asynchronous learning:

There will be regularly scheduled lectures on Mondays and Wednesdays between 6 and 9 pm, Toronto time, and you will be able to attend these classes online in real-time. If you cannot attend these online classes during scheduled hour, there will be asynchronously opportunities to learn the course material including watching recorded lectures, participate in discussion groups online, and completing the course assessments at times that are more flexible to suit your personal schedules and the time zones where you are living.

Class Times: Mondays and Wednesdays between 6 and 9 pm, Toronto time. Lectures will be recorded and available on-line through Quercus within 24 hours after the scheduled class.

Class Announcements: I will use Quercus to post course announcements, advice and content.

Online Office Hours: Mondays and Wednesdays, 4-5:45 pm, Toronto time, or by appointment. All Office hours will be held online via Bb Collaborate in Quercus.

Communication: You will need to communicate with me via the Inbox tool in Quercus for record-keeping and identification purposes. I will not be able to reply to any other emails. If I can answer your email briefly, I will try to respond through Quercus within 3 business days.

Group Assignments: There will be 4 group assignments. To complete the assignments, students will also be able to communicate with their group members via the group discussion boards built in Quercus.

TOPICS:

- What is the role of money?
- The bond and stock market, and the allocation of savings through financial markets
- The behaviour and term structure of interest rates
- Rational expectations and the efficient market hypothesis
- Financial institutions, risk and regulation
- Banking and financial crises
- Central banks and the conduct of monetary policy
- The foreign exchange market and the determination of exchange rates

Learning objectives:

- Gain a better understanding of the Canadian banking sector, financial markets and their interaction with the broader economy
- Increase familiarity with how financial markets, such as bond and stock markets, operate, and learn how they may promote economic efficiency
- Gain a better understanding of the role of the central bank and how monetary policy can influence growth and fluctuations in the economy
- Learn about the functions of money, why and how it promotes economic efficiency, and discover how its form has evolved over time
- Gain a better understanding of how changes in interest rates affect consumers, businesses, financial institutions, and the overall economy
- Understand how foreign exchange markets operate and why exchange rates are important, and the main factors that affect exchange rates in the long run
- Gain a better understanding of how financial systems around the world contributed to the decade-old global financial crisis and great recession
- Improve competence working with economic and financial market data
- Apply course concepts to real-world and hypothetical economic shocks and conduct economic research and analysis
- Communicate effectively in written work

Prerequisites:

Prerequisites are strictly checked and enforced and must be completed before taking a course. I cannot waive prerequisites:

<http://www.economics.utoronto.ca/index.php/index/undergraduate/load/prerequisites>

By taking this course, you acknowledge that you will be removed from the course at any time if you do not meet all requirements set by the Department of Economics. Further information can be found in the 2019-2020 Courses Calendar which is available from the Registrar's Office.

Required eText:

The Economics of Money, Banking, and Financial Markets, 7th Canadian Edition, Frederic Mishkin, Apostolos Serlitis. Pearson Publishers. The eText will be used extensively during the course. Students can purchase an access code from the bookstore.

http://www.campusebookstore.com/integration/AccessCodes/default.aspx?bookseller_id=96&Course=STG+ECO349+MONEY%2c+BANKING+AND+FINANCIAL+MARKETS&t=permalink

Students may use the 6th Canadian edition of the textbook, given the limited changes and only slight increase in new content in the new eText, but they are responsible for all new content included in the 7th Canadian Edition of “The Economics of Money, Banking, and Financial Markets” (Mishkin and Serlitis).

Each class we will cover one or two chapters from the eText. You are expected to complete the required readings, watch any uploaded videos and complete quizzes and assessments by their due dates. You will have an opportunity to ask questions live during scheduled classes and during virtual office hours.

The following chapters of the eText will be covered:

- Class 1: Chapter 1 - Why Study Money, Banking, and Financial Markets? (Incl. Appendix)
Chapter 2 - An Overview of the Financial System
- Class 2: Chapter 3 - What is Money?
Chapter 4 - The Meaning of Interest Rates
- Class 3: Chapter 5 - The Behaviour of Interest Rates
- Class 4: Chapter 6 - The Risk and Term Structure of Interest Rates
- Class 5: Chapter 7 - The Stock Market, Rational Expectations, Efficient Market Hypothesis
- Class 6: Chapter 11 - Financial Crises
- Class 7: Chapter 14 - Central Banks and the Bank of Canada
[Money Creation in the Modern Economy](#) (Bank of England Quarterly Bulletin)
- Class 8: Chapter 16 - Tools of Monetary Policy
Chapter 17 - The Conduct of Monetary Policy: Strategy and Tactics
- Class 9: Chapter 18 - The Foreign Exchange Market
- Class 10: No class due to term tests
- Class 11: Chapter 8 - An Economic Analysis of Financial Structure
Chapter 9 - Economic Analysis of Financial Regulation
- Class 12: Chapter 10 - Banking Industry: Structure and Competition
[Contingent Capital](#) (Bank of Canada Financial Stability Report)

Along with the eText readings, I will post my lecture slides, lecture recordings and other required reading material, including journal articles and working papers, on the Quercus course portal. Please visit this site regularly for recent postings and announcements.

Online Delivery: Expectations and Requirements

To complete this online course, additional requirements – beyond the basics of having your TCard (your U of T Student ID card), a handheld calculator, paper, pencils, and erasers – include:

- Having regular access to reliable high-speed internet and reliable electricity;
- Having regular access to a reliable laptop and/or desktop computer (either a PC or a Mac) that has a working microphone and webcam; a smartphone and/or a tablet is NOT required for this course;
- Being proactive to avoid technical and other difficulties, which includes submitting well before deadlines, maintaining your devices, carefully reading all assessment instructions, and contacting me immediately with any problems;
- Ability to correctly convert local Toronto time to your time zone: we will not accept confusion about deadlines (which will be given in local Toronto time) as an excuse for lateness or missed work;
- Having a current installation of Excel and Word software, which is available at no cost to current U of T students
- Ensuring that you maintain regular backup copies of your files, use antivirus software, and schedule enough time when completing an assessment to allow for delays due to technical difficulties.

NOTE: Computer viruses, crashed hard drives, lost or corrupted files, incompatible file formats, faulty internet, and similar mishaps are common issues when using technology, and are not acceptable grounds for a deadline extension.

Tools for Developing Learning Outcomes:

The course employs economic models and a framework to understand the economics of money, banking and financial markets. The theory of informational economics, principal-agent theory, moral hazard and adverse selection will be used to understand the functioning of financial institutions and financial markets. The theoretical links between the financial sector and the real sector of the economy will be examined to get an understanding how banks and financial markets contribute to economic growth and business cycles. The course will discuss monetary theory, the functions and roles of the central bank, to gain an understanding of the interactions between the central bank and financial institutions. There will also be opportunities for in-class and office hour discussions regarding current developments in financial markets, the Bank of Canada and Federal Reserve interest rate announcements, regulatory changes for banks and financial markets, and personal finance topics.

The course also involves multiple group assignments. The final group assignment asks students to write a policy paper based on research and analysis and provide a monetary policy recommendation (e.g., due to a large hypothetical adverse shock to the global economy).

Note: Deadlines will be posted on Quercus in terms of local Toronto time. If you are in a different time zone, you are responsible for correctly determining the time of the deadline. Errors in calculations are not an acceptable reason to miss deadlines.

Grade allocation:

The final grade in the course will be determined as follows:

1. Weekly Quizzes worth 3.334% each (4 Quizzes; Only the top-3 quizzes will count): 10% of total course grade

- There will be multiple-choice quizzes based on the required readings.
- Quizzes will be conducted through the Quercus course page.
- You are responsible for following the due dates and times for each quiz.
- Quizzes cannot be completed past the due date and time.
- There are no make-ups quizzes or extensions for any reason.
- The lowest quiz score or one missed quiz will not be included.

2. Three “Small” Group Assignments: 30% of total course grade

- Students will be assigned randomly to groups of 4 or 5 students.
- Groups may work together using the discussion boards built into Quercus.
- Assignment details and rubrics will be posted on Quercus.
- Due dates: July 17, July 24, July 31

3. “Major” Group Assignment (Deadline: August 14, 2020, 6pm, Toronto time): 35% of total course grade

- The group assignment will require students to write a paper. Each student will be expected to write at least one section (or between 1000-1500 words) of the paper. Each group must have at least three and at most five members.
- Students will need to create their own groups.
- Groups must be arranged and reported in Quercus by August 5rd (11:59pm).
- Each group must submit their assignment through the Quercus course portal.

4. Term Test: 25% of total course grade

- **Students will have the choice of writing the Term test on August 7th from 8-10 am (Toronto time) or August 10th from 6-8 pm (Toronto time).**
- The test will be based on required readings from the eText, class lectures and slides.
- Questions will assess students’ knowledge, application, comprehension skills and critical thinking skills rather than only knowledge recall.
- Term tests will be analysed in Turnitin automatically after submission.

Re-marking of the Term Test may be granted. Within one week, students must provide via email, and with specificity, questions or concerns with the grading. Please be advised that the marker will re-read & re-mark the whole test. Your mark may go up, down or remain the same.

Make-up Tests: Students should plan on writing the first scheduled test on August 7th, from 8-10 am (Toronto time), if there is any chance of missing the second scheduled test on August 10th from 6-8 pm (Toronto time). A make-up test will be scheduled on August 17th from 6-8 pm (Toronto time) if a student is sick and if they have proper medical documentation.

Group Assignments - Writing Resources:

1. All undergraduate students taking courses in the Faculty of Arts and Science are eligible to work with the writing centre at the college or campus where they are registered. All seven FAS writing centres will be operating during this summer session, and all will be offering remote instruction. The modality may differ by college. Students should visit each individual centre's site for information on how to make an appointment.
2. In the summer, students may book up to TWO appointments per week. The FAS centres are listed at <https://writing.utoronto.ca/writing-centres/arts-and-science>.
3. For information about writing centre appointments visit <https://writing.utoronto.ca/news/writing-centre-summer-openings/>.
4. To learn more about how writing centres work, students may visit <http://writing.utoronto.ca/writing-centres/learning/>.
5. More than 60 Advice files on all aspects of academic writing are available from <http://advice.writing.utoronto.ca>. Printable PDF versions are listed at <http://advice.writing.utoronto.ca/student-pdfs/>.
6. Students should read "How Not to Plagiarize" and other advice on documentation format and methods of integrating sources. These pages are all listed at <http://advice.writing.utoronto.ca/using-sources/>.
7. Information about the English Language Learning program (ELL)'s summer offerings is available at <http://www.artsci.utoronto.ca/current/advising/ell>. For more information, please contact the ELL coordinator Leora Freedman at leora.freedman@utoronto.ca.

Online Submissions of Assignments: All group must submit their assignments on-line through the Quercus course portal. It is every student's responsibility to ensure that their online submission is submitted successfully by the due date. Accommodations will not be made for unsuccessful submissions due to, but not limited to: i) the system timing out; ii) submitting the incorrect document(s); and iii) poor internet connection / no internet connection etc.

Normally, students will be required to submit their course assignment to Turnitin.com (via the Quercus course portal) 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 Turnitin.com reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the Turnitin.com service are described on the Turnitin.com web site. If you have an objection to the use of Turnitin for the submission of your work, please make an appointment to speak with me to discuss alternative arrangements.

Late Assignment Policy: There will be a 10% penalty of the total assignment mark *per day* (including weekends) for a late assignment. If a group anticipates missing the assignment deadline due to uncontrollable circumstances, they should contact me at least 7 days in advance to explain the situation for consideration. Students may be required to submit supporting documentation at my discretion. The reallocation of grades for assignments missed for legitimate reasons will be made at my discretion. Group assignments handed in *after* the work has been returned to the class cannot be marked for credit. Accommodations due to late registration into the course will *not* be approved.

Academic Integrity, University Rules and Policies: Academic Integrity applies to every member of the University. We take it seriously and so should you. This is especially relevant for an online course. I will report all suspected cases of academic dishonesty to the Department of Economics and the consequences can be severe. Being unaware of the policies or what is considered plagiarism is, unfortunately, not a defense. Collaborating, providing or receiving answers or unauthorized help from someone else on submitted work violates Academic Integrity. You can discuss broad ideas with classmates and us, but the work has to be yours.

Please see <http://www.artsci.utoronto.ca/osai> for more information.

For any issues that extend beyond our course, contact your College Registrar immediately. Please read the University of Toronto rules and policies dedicated to fostering a safe and secure environment in which the learning and scholarship of students may flourish.

Information at <https://www.viceprovoststudents.utoronto.ca/students/> provides an overview of these rules & policies, and outlines expectations the University has for its students. You will find a directory of the policies, guidelines, publications, and resources that relate to your work and conduct as a student at the University of Toronto:

- Accommodations Religious Observances
- Academic Accommodations
- Code of Student Conduct
- Code of Behaviour on Academic Matters
- Discrimination
- Freedom of Speech
- Sexual Violence & Sexual Harassment Prevention and Support
- University-Mandated Leave of Absence Policy
- Alcohol
- Obstruction
- Use of Technology

Accessibility:

For accessibility services/accommodation, please see: <http://www.studentlife.utoronto.ca/as>

Resources to help you at the UofT are listed at the Academic Success Centre:
<https://www.studentlife.utoronto.ca/asc>

For course-related issues, please get in touch with me and your College Registrar. For longer-run issues or issues outside our course please contact your College Registrar
<http://www.artsci.utoronto.ca/newstudents/nextsteps/contact>

Schedule: Classes, Quizzes, Assignments and Tests:

- July 6 – **Scheduled Class 1**
 - Chapter 1 & 2
 - Discuss Course Syllabus (Course Organisation, eText, Topics, Grading, etc.)
 - Overview of Course Website via Quercus
- July 8 – **Scheduled Class 2**
 - Chapter 3 & 4
 - Announcement of Small Group Assignment #1:
 - **Topic: What is Money? Choose a recently introduced retail payment instrument (e.g., PayPal, Bitcoin, Apple Pay, etc.) and determine if it should be considered 'money.'**
 - About 2000 words (not including cover page, references, charts, tables)
 - 10% of total course grade
 - 4 or 5 students chosen randomly by instructor in Quercus
 - **Rubric:**
 - **A cover page** must include the title of your paper, student names and student numbers, course number, instructor's name, and a 150-word summary. (0.5%)
 - **Section 1** of paper: Choose a relatively new retail payment instrument (e.g., PayPal, Bitcoin, Apple Pay, etc.). Describe how specifically the payment instrument works? (around 200 words, 0.5%)
 - **Section 2** of paper: What are the economically important terms and conditions for consumers and business (i.e., affect their behaviour) that use the payment instrument? (around 200 words, 0.5%)
 - **Section 3** of paper: What are the costs and benefits (including incentives) for consumers and retailers to use the payment instrument? (around 400 words, 2%)
 - **Section 4** of paper: Does the payment instrument serve as a medium of exchange, a unit of account and a storage of value? Explain. (around 400 words, 2%)
 - **Section 5** of paper: Based on a literature review (i.e., references to academic economic journals and central bank working papers), explain why central banks should or should not introduce a central bank-sponsored electronic retail payment instrument (that may compete against private sector retail payment instruments). Discuss costs, benefits and systemic risks associated

with a central bank-sponsored retail payment instrument. (around 800 words, 4%)

- **A list of references** must be included at the end of your paper; Use <https://www.bankofcanada.ca/wp-content/uploads/2013/11/wp2013-41.pdf> as an example of how to organise your references and use footnotes. You must provide details of all external sources of information used, including websites, in footnotes or in your references. Your paper should be **clear and well written**, and free of spelling and grammatical errors. **Mandatory formatting:** 1-inch margins; double-spaced; Use 'Times New Roman' with '12' font size. All charts, figures, tables should be included as appendices at the end of your paper. **(0.5%)**
- July 9 (Due: 6pm, Toronto time; To be posted July 8 at 6pm) – Quiz #1 Deadline: Covering Chapters 1-3
- July 13 – **Scheduled Class 3**
 - Chapter 5
 - Announcement of Small Group Assignment #2:
 - **Topic: Determine the properties of a stock market bubble.**
 - About 2000 words (not including cover page, references, charts, tables)
 - 10% of total course grade
 - 4 or 5 students chosen randomly by instructor in Quercus
 - **Rubric:**
 - **A cover page** must include the title of your paper, student names and student numbers, course number, instructor's name, and a 150-word summary. **(0.5%)**
 - **Section 1** of paper: Describe in detail, with the support of tables and graphs, a major stock market bubble that occurred in the last 50 years (Note: No copying and pasting, please download and plot the data yourselves). **(around 300 words, 1%)**
 - **Section 2** of paper: Based on a short literature review (i.e., references to academic economic journals and central bank working papers), explain the different reasons for the rapid increase in stock prices during your chosen bubble. **(around 400 words, 2%)**
 - **Section 3** of paper: Based on a short literature review (i.e., references to academic economic journals and central bank working papers), describe the reasons for the eventual correction during your chosen bubble. **(around 400 words, 2%)**

- **Section 4** of paper: Describe in detail, with the support of tables and graphs, the behaviour of other securities' returns and prices during your chosen bubble (Note: No copying and pasting, please download and plot the data yourselves). **(around 400 words, 2%)**
 - **Section 5** of paper: Based on a short literature review (i.e., references to academic economic journals and central bank working papers), describe how bond and stock prices are related during bubbles periods. **(around 500 words, 2%)**
 - **A list of references** must be included at the end of your paper; Use <https://www.bankofcanada.ca/wp-content/uploads/2013/11/wp2013-41.pdf> as an example of how to organise your references and use footnotes. You must provide details of all external sources of information used, including websites, in footnotes or in your references. Your paper should be **clear and well written**, and free of spelling and grammatical errors. **Mandatory formatting:** 1-inch margins; double-spaced; Use 'Times New Roman' with '12' font size. All charts, figures, tables should be included as appendices at the end of your paper. **(0.5%)**
- July 15 – **Scheduled Class 4**
 - Chapter 6;
- July 16 (Due: 6pm, Toronto time; To be posted July 15 at 6pm) – Quiz #2 Deadline: Covering Chapters 4-6
- July 17 (6pm, Toronto time) – Small Group Assignment #1 Deadline
- July 20 – **Scheduled Class 5**
 - Chapter 7;
 - Announcement of Small Group Assignment #3
 - **Topic: Determine the properties of yield curves**
 - About 2000 words (not including cover page, references, charts, tables)
 - 10% of total course grade
 - 4 or 5 students chosen randomly by instructor in Quercus
 - **Rubric:**
 - **A cover page** must include the title of your paper, student names and student numbers, course number, instructor's name, and a 150-word summary. **(0.5%)**
 - **Section 1** of paper: *Describe and explain* the behaviour (i.e., dynamics) of government yield curves in a group-chosen advanced economy. Focus on recent years leading up to the end

of 2019. Don't choose the US or Canada. Download and plot the data yourself. **(around 300 words, 1.5%)**

- **Section 2** of paper: *Describe and explain* the behaviour (i.e., dynamics) of government yield curves in your chosen country. Focus on the period between the beginning of 2020 and the start of July 2020? Download and plot the data yourself. **(around 300 words, 1.5%)**
 - **Section 3** of paper: *Describe* the behaviour (i.e., dynamics) of government yield curves in Canada and the US. Focus on the period between the beginning of 2020 and the start of July 2020? Download and plot the data yourself. **(around 400 words, 2%)**
 - **Section 4** of paper: *Explain in detail* the reasons for differences between yield curve dynamics in your chosen country and those in Canada and the US since the start of 2020. **(around 400 words, 2%)**
 - **Section 5** of paper: *Describe* changes in yields of short-, medium- and long-term government bonds in your chosen country in recent months, and compare them to yields in your chosen country at the start of the Great Financial Crisis of 2008-09. **(around 400 words, 2%)**
 - You must provide details of all external sources of information used, including websites, in footnotes or in your references. **A list of references** must be included at the end of your paper; Use <https://www.bankofcanada.ca/wp-content/uploads/2013/11/wp2013-41.pdf> as an example of how to organise your references and use footnotes. Your paper should be **clear and well written**, and free of spelling and grammatical errors. **Mandatory formatting:** 1-inch margins; double-spaced; Use 'Times New Roman' with '12' font size. All charts, figures, tables should be included as appendices at the end of your paper. **(0.5%)**
- July 22 – **Scheduled Class 6**
 - Chapter 11
 - July 23 (Due: 6pm, Toronto time; To be posted July 22 at 6pm) – Quiz #3 - Deadline: Covering Chapters 7 & 11
 - July 24 (6pm, Toronto time) – Small group assignment #2 Deadline
 - July 27 – **Scheduled Class 7**
 - Chapter 14
 - Additional Reading: [Money Creation in the Modern Economy](#) (Bank of England Quarterly Bulletin)

- Announcement of “Major” Group Assignment (Deadline: August 14, 2020, 6pm, Toronto time)
- July 29 – **Scheduled Class 8**
 - Chapters 16 & 17
- July 30 (Due: 6pm, Toronto time; To be posted July 29 at 6pm) – Quiz #4 - Deadline: Covering Chapters 14, 16 & 17
- July 31 (6pm, Toronto time) – Small group assignment #3 Deadline
- August 3 – **Statutory Holiday**
- August 5 – **Scheduled Class 9**
 - Chapter 18
 - Student groups for “Major” Group Assignment must be organised and reported in Quercus by August 5, 2020 @ 11:59pm, Toronto time.
- August 7: **Term test, Option 1 (8-10 am, Toronto time): Non-scheduled class time**
- August 10 – **Scheduled Class 10**
 - **Term test, Option 2 (6-8 pm, Toronto time): During scheduled class time**
- August 12 – **Scheduled Class 11**
 - Chapters 8 & 9
- August 14 – **Large group assignment due by 6pm (Toronto time)**
- August 17 – **Scheduled Class 12**
 - Chapter 10
 - Additional Reading: [Contingent Capital](#) (Bank of Canada Financial Stability Report)
 - **Make-up term test for approved students only**