# UNIVERSITY OF TORONTO Financial Economics I - Investment (ECO358H1F) Fall 2020

# **Course Description**

ECO358 offers an introduction to economics of financial assets and financial markets. Topics we will discuss are: individual intertemporal choice, expected utility theory, portfolio choice, security valuation, models of asset pricing, market efficiency, and the term structure of interest rates. We will also provide an introduction to options and behavioral finance. This course aims to offer essential materials for an understanding of the role and operation of financial markets. You should expect a combination of math-based theory and practical problems.

#### Instructor

Nathanael Vellekoop, PhD Assistant Professor Department of Economics, University of Toronto

#### **Class Email Address**

The dedicated email address for this class is <a href="mailto:eco358.vellekoop@utoronto.ca">eco358.vellekoop@utoronto.ca</a>. A TA and I will regularly check this email address, but please give us 1-2 business days to respond.

#### **Course Format**

The format of the course is online and what is called asynchronous (=posted recordings).

Motivation: the course is fully online because of the size (400+ students), we have few lecture rooms on campus that can accommodate that many students with physical distancing. I chose the asynchronous format (= no set lecture and tutorial times throughout the week) for the same reason. There is little benefit to do a zoom lecture with 150 students: there is typically not much interaction and still temptation to do something else or check out. Moreover, I expect quite a few students to be in timezones that are in the middle of the night for them, which is not nice.

I will post recordings of the lectures and tutorials each week on Monday (lectures) and Tuesday (tutorials) the latest. The drawback of asynchronous online is that it requires students to be more disciplined in keeping up with the material – there is a lot of material to cover in few weeks. One solution for that is to offer weekly small-stakes quizzes and more (smaller) midterm tests (more on that below).

However, this course is not a self-taught course (but it can be if you want to). I will schedule plenty of contact hours throughout the week, and there will be a few moments throughout the course that are timed. Those will be announced ahead of time, and you will get the opportunity to choose from different timeslots.

## **Prerequisites**

You yourself are responsible to check and make sure that you have fulfilled all requirements set by the University of Toronto to participate in this course. See for the appropriate prerequisites: <a href="https://www.economics.utoronto.ca/index.php/index/undergraduate/load/prerequisites">https://www.economics.utoronto.ca/index.php/index/undergraduate/load/prerequisites</a>

#### **Tech Requirements**

You must have access to a laptop or desktop computer with a strong, stable internet connection. A phone is not an acceptable substitute as some required components may not be accessible on smartphones. A camera and mic are required for online contact activities such as office hours. High speed broadband access (LAN, Cable or DSL) is highly recommended This course requires the use of computers, and of course, sometimes things can go wrong when using them. You are responsible for ensuring that you maintain regular backup copies of your files, use antivirus software (if using your own computer), and schedule enough time when completing an assignment to allow for delays due to technical difficulties. Computer viruses, crashed hard drives, broken printers, 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.

See for Tech support (Quercus): <a href="https://onesearch.library.utoronto.ca/ic-help-desk-knowledge-base">https://onesearch.library.utoronto.ca/ic-help-desk-knowledge-base</a>

#### **Time Zones**

All times posted in the syllabus and on Quercus will be in Toronto time (EDT and EST after daylight savings time ends on November 1 – note that different countries may have a different end date for daylight savings time.) If you are in a different time zone, please make sure you correctly identify what EST converts to where you are. Errors in calculations are not an acceptable reason to miss deadlines.

#### **Professor Office Hours**

I have two types of office hours. Every week on Tuesday 16-18:00 Toronto time I have open office hours on Quercus (through Bb Collaborate). This is the office hour for questions about the lecture recordings, and other course or content related issues. I am looking forward to seeing you there, and feedback is much appreciated.

The other type of office hour I hold is every week on Monday 17-18:00 Toronto time through Microsoft Teams (free for UofT students). This office hour is only for non-content related questions, for example mental health issues, or advice on master programs. This office hour is also a great way to introduce yourself if you have plans to ask me for a letter of recommendation after the course (see section towards the end of the syllabus).

To sign up for this office hour you need to do two things. First, book a 15 minute slot (only one) at <a href="https://calendly.com/prof-vellekoop/office-hours">https://calendly.com/prof-vellekoop/office-hours</a>. Second, create an invitation in Microsoft teams for the timeslot you booked, and send me the invitation by email at <a href="mailto:n.vellekoop@utoronto.ca">n.vellekoop@utoronto.ca</a>. Once I have confirmed the appointment, your slot is booked.

#### **Piazza Discussion Board**

We will use Piazza as a Q&A forum during class. Piazza is now integrated with Quercus. One of the TAs and I will regularly look and contribute to Piazza. Please keep the discussion and answers civil (we can see your names), and only related to course content.

The sign-up link is www.piazza.com/utoronto.ca/fall2020/eco358h1

#### **TA Office Hours**

The following TAs have weekly office hours, starting in week 2. Office hours will be online and held through Bb Collaborate. The schedule will be posted on Quercus. More office hours will be offered the week before tests. Alison Taylor, Reyam Alkobaisi, Sobia Jafry and Jerry Luo. Note that Jerry's office hours are dedicated for students in other time zones (other than the Americas).

Hint: office hours are a great way to get some of a normal class feel. Even if you don't have questions yourself, feel free to join an office hour and listen in.

# **Email policy**

All emails should be send to the dedicated email address for the class: <a href="mailto:eco358.vellekoop@utoronto.ca">eco358.vellekoop@utoronto.ca</a>. A TA and I will monitor the inbox. Please allow for a response within 1-2 business days. Please be brief, clear and specific in your email. Please use your UTOR e-mail account (the "utoronto" account). E-mails from other accounts may not reach us and your e-mail address helps us to identify you. Please include your full name, preferred name, and student number in the body of the email. If there is no response after 3 business days, please re-send your message to remind me or the TA.

# **Course Materials (required)**

"Corporate Finance" by Jonathan Berk, Peter DeMarzo and David Stangeland, 2019, 4th Canadian edition, Pearson. You can use older versions or the American version (at your own risk). I will not provide an overview of differences between versions.

Motivation: many students will continue with ECO359 "Financial Economics II", and I have coordinated with the instructor (Prof. Tsoy) that we will use the same book in both courses, so you will only have to buy the book once. We will cover most of the first 15 chapters.

MyLab is optional, and the publisher has promised me that a MyLab subscription is valid for the entire year (so for both ECO358 and for ECO359 if you were to purchase it).

A link where you can order an online version of the book is here: <a href="https://www.campusebookstore.com/integration/AccessCodes/default.aspx?bookseller\_id=96">https://www.campusebookstore.com/integration/AccessCodes/default.aspx?bookseller\_id=96</a> &Course=STG+ECO358+CORPORATE+FINANCE&frame=YES&t=permalink

**Moblab (required)**: you need to buy a subscription for the Moblab platform. Moblab is an online environment to play economic games. We will use this extensively throughout the course to experience and illustrate several principles in class. We have received a 60% discount of the regular price: we pay 10 USD. Instructions how to enroll can be found at the end of the syllabus.

Motivation: I am aware that this another expense, but I only require students to pay for materials that we will use in class, and I hope that the use of MobLab will help to increase engagement.

**Software**: We will use Excel for calculations (you may use a financial calculator instead). Excel and Microsoft Teams are freely available for UofT students.

	Week of	Topic	Chapter	Midterm Coverage
1	14-Sep	Arbitrage, Time Value of Money	3-4	
2	21-Sep	Time Value of Money, Interest Rates	4-5, 5A	Start of office hours and quizzes
3	28-Sep	Valuing Bonds and Term Structure	6, 6A	
4	5-Oct	Valuing Stocks	7.1-7.4	
*	Thu Oct 8	Midterm 1		Lectures 1-3 (100%)
5	12-Oct	Capital Markets and Pricing of Risk	10	
6	19-Oct	Risk, Optimal Portfolio Choice	10, 11	
7	26-Oct	Optimal Portfolio Choice, CAPM	11, 11A	
*	Thu Oct 29	Midterm 2		Lectures 1-3 (25%) and 4-5 (75%)
8	2-Nov	Investor Behaviour, EMH	7.5, 13	
*	9-Nov	Reading Week		
9	16-Nov	Estimating the Cost of Capital	12, 12A	
*	Thu Nov 19	Midterm 3		Lectures 4-5 (25%) and 6-7 (75%)
10	23-Nov	Financial Options	14	
11	30-Nov	Option Valuation	15	
*	Mon Dec 7	Midterm 4		Lectures 6-7 (25%) and 8-9 (75%)
*	TBA	Final Assessment		

- "A" refers to the appendix of the chapter, for example 5A is the appendix to chapter 5.
- The final test will be scheduled by the university in the period December 7-20.
- For the midterm tests the coverage is scheduled. The percentages in brackets refer to the relative weight of the material. For example, for midterm 2 most of the weight is on new material (lectures 4 and 5) and some weight on material that is already tested (lectures 1-3). My goal is to help you keep track of the material during the term.
- The final covers all materials discussed. In general, if a concept, definition or problem is discussed in class, it can be part of a test.

# Grading

- 5% Participation and performance in MobLab guizzes and games.
- 10% Weekly Quercus quizzes: there will be 10 or 11 quizzes and I will drop the lowest grade. These are short (15-30 minute) quizzes similar to tutorial questions of the week before. Quercus quizzes will be released every Tuesday starting in week 2, and you have a 24 hour window to complete the test (detailed instructions follow on Quercus).
- 45% Four midterm tests (60 minutes writing time each). The midterms do not carry the same weight, that depend on your own scores. Your highest grade will be weighed with 20%, your second highest score 15%, 10% for the third highest score, and I will drop the lowest score. The tests will be held Thursday evening Toronto time, except for test 4, which is a Monday evening. Exact time and instruction will be announced.
- 40% Final assessment (120 minutes writing time). The final is comprehensive and will cover all material discussed in class.

Motivation: instead of doing the usual two midterms, I opted for more, but shorter tests (total test time is about the same as last year). One reason is the hope that smaller tests will make online testing less stressful (consequences of internet disruptions, noisy neighbors, etc.).

Another reason is that more frequent tests may help absorb the material better. The writing time is 60 minutes, but we need some time before (onboarding and instructions) and after the test (for uploading of answers into Crowdmark). We will offer some test runs prior to the test and give detailed instructions.

The midterms cover 75% of new material and 25% of already quizzed material, see the course outline (except for the first midterm). There are no make-up possibilities for the midterm tests or the weekly Quercus quizzes (that is why your lowest score on both will be dropped).

Time zone conflicts will be accommodated, please check Quercus announcements regularly. The final assessment will be scheduled by the university in the period December 7-20, 2020. All quizzes will be held online, either through Quercus quizzes, Crowdmark assigned tests or a combination of the two.

To maintain academic integrity, we will use zoom or Microsoft Teams to invigilate tests and may ask you to record your screen activity. You will need a webcam or camera (see tech requirements for the course).

#### **Missed tests**

There is no makeup possibility for missed midterm tests or Quercus quizzes: you can miss one of each without any consequences for your grade. If you miss two midterm tests because of medical reasons or other grave circumstances, you need to reach out to **your college registrar** first, explain your situation, and have **them** contact me. I will not discuss or look at certificates of medical illness. Procedures for missing the final assessment will be announced later.

# Appealing your grade

Disputes over the evaluation of a test should be discussed with me. Disagreement with the marking means that an error might have been made – for instance, the marker failed to consider a part of your answer. Conversely, suggesting that you believe you deserved a higher grade is not a valid reason for a re-grade. After reviewing the solution posted on the course website, use the re-grade request form on Quercus. You must submit your appeal no later than two weeks (10 business days) after the solutions have been posted on Quercus. In your appeal, you must identify the questions that you believe were marked incorrectly and provide an explanation as to why you believe you deserve additional marks. Please note that for tests all questions may be remarked – not only the question in dispute. As a result, your grade for the test can be higher, the same, or lower.

#### **Practice Material**

Old midterms with solutions will be posted on Quercus. There are plenty of practice questions in the book, and even more practice material on MyLab (though the purchase of MyLab is optional). I will not post solutions of other questions, but you can discuss them in office hours.

#### **Resources and ATS**

Students with diverse backgrounds, perspectives, learning styles and needs are welcome in this course. We want to create a welcoming inclusive environment. If you see ways do better, help us improve with your suggestions. If you need help achieving academic success in this course, please reach out.

For accessibility services/accommodation, please see: <a href="http://www.studentlife.utoronto.ca/as">http://www.studentlife.utoronto.ca/as</a> Resources to help you at the UofT are listed at: <a href="https://www.studentlife.utoronto.ca/asc">https://www.studentlife.utoronto.ca/asc</a> 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 <a href="http://www.artsci.utoronto.ca/newstudents/nextsteps/contact">http://www.artsci.utoronto.ca/newstudents/nextsteps/contact</a>

Note: students who typically write tests with Accommodating Testing Services (ATS) might experience that the move online is different and that wait and response times might be long. If you have an accommodation to receive more writing time for quizzes and tests, please send me your ATS form directly at <a href="n.vellekoop@utoronto.ca">n.vellekoop@utoronto.ca</a>. I will make sure you get the accommodation that is needed.

# **Recommendation Letters**

Sometimes I get requests of students who ask me to write a letter of recommendation for them. There are two types of letters. The first is basically a letter of confirmation that you took my course, passed with a certain grade, and your relative position in the class (top 10%, top 25%, etc.). This is a letter I can always write for you – just notify me a week before your deadline and a specific list of places where the letter needs to be sent to. Be aware though that this type of letter will not help your chances of acceptance for programs that require the second type of letter. It is your responsibility to figure out which letter is sufficient for your program.

The second letter is a proper reference letter, which in addition contains my assessment of your participation in class, your academic abilities, whether I believe you will be a good fit with the program you apply for, among other things. These letters I only write for students with a grade of 85% or higher, and/or students whom I got to know during class. In order for me to write such a letter, I need to have something to write about you (and I am well aware that doing the course online is going to make that more complicated). Things you can do there in addition of outstanding academic performance is to show up regularly in office hours and contribute, meet me at least once for a non-content office hour. Note that even if you are an excellent student in this course, I may not write letters to top places for you.

Important: for both types of letters the following: Please do **not** send me reminders of deadlines after I agree to write a letter for you.

## **Academic integrity**

Academic integrity is one of the cornerstones of the University of Toronto. It is critically important both to maintain our community which honours the values of honesty, trust, respect, fairness and responsibility and to protect you, the students within this community, and the value of the degree towards which you are all working so diligently. According to Section B of the University of Toronto's Code of Behaviour on Academic Matters <a href="https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019">https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019</a>, which all students are expected to know and respect, it is an offence for students:

- To obtain unauthorized assistance on any assignment.
- To provide unauthorized assistance to another student. This includes showing another student completed work (e.g., an answer on a test).

- To falsify or alter any documentation required by the University. This, includes, but is not limited to doctor's notes.
- To use or possess an unauthorized aid in any test or exam (e.g., a cell phone).
- To continue writing when the time is up in any test or exam.
- To submit a medical note to get out of a test when the student is not actually sick.

There are other offenses covered under the Code, but these are by far the most common. Please respect these rules and the values which they protect. For useful tips for avoiding academic misconduct, please visit the website of the Office of Student Academic Integrity at <a href="https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity">https://www.artsci.utoronto.ca/current/academic-advising-and-support/student-academic-integrity</a>.





#### Register with MobLab

Go to <a href="www.moblab.com">www.moblab.com</a>, click 'Sign Up' to sign-up for a Student Account. You can also download the MobLab iOS or Android app and create your student account through the app.

IMPORTANT: To facilitate recordkeeping, use your university email address.

#### Join the Class

Using a browser or the MobLab app, sign into the Student Console. Choose Join a Class and enter our Class Code:

# bepz4u3w3



In the resulting popup, you will be prompted for the student fee which is payable by credit card. If you received a textbook access code from the bookstore, you can redeem it here. Once your payment or access code is processed, you should have confirmation that you have joined our class.

#### What do I need to participate?

To participate in MobLab games you need an internet-connected device. Laptop users can use any browser. I strongly recommend that iOS (iPhone and iPad) and Android users use the MobLab app downloadable from the device's app store. Trust me, the app is so much better for playing on handheld devices!

#### Playing games

When instructed, access the Student Console in your browser or open the app on your iOS or Android device. You will see your class's session if your instructor has already started it. If not, wait for the session to start. You may need to click the active session or refresh button ( ). To refresh the mobile app, simply pull down on your device's screen. Once the session is visible, click the playlist card.



# Have Questions?

If you have any questions or run into any issues, please email support@moblab.com.



www.mobiah.com

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