UNIVERSITY OF TORONTO
DEPARTMENT OF ECONOMICS
St. GEORGE CAMPUS

ECO358 – Financial Economics I (Asset Pricing)
Course Outline – Summer 2021

Instructor: **Dr. Ata Mazaheri**
Office Hours: **Zoom (Wednesday 11-12PM)**
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Web Page: **https://q.utoronto.ca (Quercus)**

Course Delivery

ECO358 will be delivered completely online so a reliable internet access is imperative.

The lectures will be recorded using "Snagit" and posted on a weekly basis on Quercus so in total there will be 11 separate lectures. For each topic, you are expected to complete the readings, watch the videos, complete the problem sets. To help you with all these, there will be TA office hours on Bb collaborate as well as discussion boards. My TAs will also conduct weekly tutorials on Bb Collaborate during the scheduled class time. Those will also be recorded and can be played at a later date.

Time-zones: All times posted will be in EST, i.e. local Toronto 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.

Course Description:

This course provides you with the analytical tools needed to understand the issue of security valuation and hence to make the appropriate investment decisions. It is an introductory course in the portfolio theory and asset pricing which form the foundation of investment. The main topics covered in this course include valuation in the world with certainty, individual, risk and return, arbitrage, and market equilibrium. More specifically, we cover the basics of valuation applied to bonds and stocks, the mean-variance analysis**,** the Capital Asset Pricing Model (CAPM), factor portfolios and Arbitrage Pricing Theory (APT), as well as Arrow-Debreu state prices followed by market efficiency as well as option pricing.

The course challenges you on both theoretical as well as the empirical fronts. While on the theoretical front the course goes rather deep in the valuation methods, at the same time the empirical component of the course requires you to apply the methods learned to real world security analysis.

Course Objectives:

By the end of this course you are expected to learn:

- The role of the most fundamental markets and institutions
- Tools commonly used in investment analysis
- Pricing default-free fixed-income securities as well as the term structure of interest rate.
- Theories of risk-factor pricing, such as the Capital Asset Pricing Model (CAPM)
- The alternatives to CAPM such as State Prices and the Arbitrage Pricing Theory (APT)
- Basics of derivatives markets, as well as the pricing of derivative instruments and their use as hedging tools.
- How to apply the valuation methods to virtual portfolio

Textbook:

There is no required textbook. However, the following is recommended.

Bodie, Kane, Marcus, Perrakis, Ryan, 2019, *Investments*, 9th Edition, McGraw-Hill. ISBN: 0070965455 [BKM]

I will be posting my notes incrementally. Part of my notes is based on BKM but most of it is not. You are recommended to purchase the book more so at the start of the course where you have to familiarize with the institutional issues and when my notes and the book overlap. I will assign parts of the book for your reading as well. I will leave a copy with the short- term desk for you to borrow in case you do not want to purchase the book.

Evaluation:

	Weight	Time (Tentative)	Location
Term Test-1	**25%**	May 20 (9AM)	Online (Quercus)
Term Test-2	**25%**	June 3 (9AM)	Online (Quercus)
Final Exam	**50%**	TBA	Online (Quercus)
Total	**100%**		

Notes:

- **Test-1**: Material covered till the end of **Lecture-4**.
- **Test-2:** Material covered from **Lecture-5** till the end of **Lecture-8**.
- **Final Exam:** Inclusive of all the material learned in the lecture.

If you are unable to write a term test at its scheduled time because of illness or other compelling circumstances, you need to present documentation supporting your reasons for missing the examination, no later than a week after the assessment. There will be no makeup test. If you miss a term test **for any reason**, the final exam will be re-adjusted for the total of 75%. If you miss both term tests, **the second miss will be automatically zero**.

Aids Allowed in Tests and Final Exam

- The assessments are open book but should be done individually.
- By taking the assessments you are making the following pledge:
  "The University of Toronto's Code of Behaviour on Academic Matters applies to all University of Toronto students. The Code prohibits all forms of academic dishonesty including, but not limited to, cheating, plagiarism, and the use of unauthorized aids. Students violating the Code may be subject to penalties up to and including suspension or expulsion from the University.
  In submitting the assessments in Quercus under my name, I confirm that my conduct during this assessment adheres to the Code of Behaviour on Academic Matters. I confirm that I did NOT act in such a way that would constitute cheating, misrepresentation, or unfairness, including but not limited to, using unauthorized aids and assistance, collaborating with another person, impersonating another person, and committing plagiarism."

Activating your UTORid and Password

If you need information on how to activate your UTORid and set your password for the first time, please go to www.utorid.utoronto.ca. Under the "First Time Users" area, click on "activate your UTORid" (if you are new to the university) or "create your UTORid" (if you are a returning student), then follow the instructions. New students who use the link to "activate your UTORid" will find reference to a "Secret Activation Key". If you need help visit the Scarborough campus computing help desk (B-487) to obtain help. **The course instructor will not be able to help you with this.**

Email Communication with the Course Instructor

At times, the course Instructor may decide to send out important course information by email. To that end, all UofT students are required to have a valid UofT email address. You are responsible for ensuring that your UofT email address is set up AND properly entered in the ROSI system. You can do that by using the following instructions:

To submit the information to activate your UTORid and password (see above), you will need to click the "Validate" button. Follow the instructions on the subsequent screens to receive your utoronto.ca address. Once you have your UofT email address, go to the ROSI system (www.rosi.utoronto.ca), log in and update the system with your new UofT email address.

You can **check your UofT email** account from

1. The UofT home page http://www.utoronto.ca: From the Quick Links menu on the top right, choose "my.utoronto.ca". Enter your UTORid and password, and when the Welcome page opens, click "WEBMAIL".
2. Email software installed on your computer, for example Microsoft Outlook or Mozilla Thunderbird. Visit the Help Desk at the Information Commons or call 416-978-HELP for help with the set up.

Forwarding your utoronto.ca email to a Hotmail, Gmail, Yahoo or other type of email account is not

advisable. In some cases, messages from utoronto.ca addresses sent to Hotmail, Gmail or Yahoo accounts are filtered as junk mail, which means that emails from your course instructor may end up in your spam or junk mail folder.

You are responsible for:

1. Ensuring you have a valid UofT email address that is properly entered in the ROSI system
2. Checking your UofT email account on a regular basis.

Preparation

- Lecture notes are posted several days ahead of the lecture. It is important to read them <u>before</u> attending each lecture. It is necessary to try the problem sets after each lecture before attending the next lecture. Solution to those problem sets are posted as well but it is essential that you do the question on your own before consulting the solutions!
- Practice tests will be posted on the website and will be discussed and expanded during the review sessions. Make sure you spent time on those questions before each assessment.

Course Timetable

	Topic	Text Reading
Lecture-1	Introduction – Overview of Financial Markets	BKM: 2
Lecture-2	Valuation: World without Uncertainty Bond Valuation-I	Course-Pack Topic-1
Lecture-3	The Term Structure of Interest Rates Stock Valuation	Course-Pack Topic-1
Lecture-4	Risk, Expected Utility Theory, Basic Tools of Modern Portfolio Analysis	Course-Pack Topic-2
	Test-1	
Lecture-5	Mean Variance Analysis Portfolio Selection	Course-Pack Topic-2
Lecture-6	Capital Asset Pricing Model	Course-Pack Topic-3
Lecture-7	Factor Models and Arbitrage Pricing Theory (APT)	Course-Pack Topic-3
Lecture-8	Market Efficiency	Course-Pack Topic-3
	Test-2	
Lecture-9	State Prices	Course-Pack Topic-4
Lecture-10	Options I	Course-Pack Topic-5
Lecture-11	Options II	Course-Pack Topic-5