UNIVERSITY OF TORONTO
DEPARTMENT OF ECONOMICS
St. GEORGE CAMPUS

ECO358 – Financial Economics I (Asset Pricing)
Course Outline – Summer 2022

Instructor: **Dr. Ata Mazaheri**
Office Hours: **Zoom (Tuesday 12PM)**
E-mail Address: **mazaheri@chass.utoronto.ca**
Web Page: **https://q.utoronto.ca (Quercus)**

Course Delivery

Please refer to the announcement of Quercus.

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%**	TBA	TBA
Term Test-2	**25%**	TBA	TBA
Final Exam	**50%**	TBA	TBA
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.

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

- Both term tests as well as the final exam are closed book. However, you are permitted to bring a non-programmable calculator and a **hand-written** "crib sheet" to each of the assessments. For the term tests and the final, you may use **one side** of one 8½" × 11" page with "HANDWRITTEN" notes and/or formulae.

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 before 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