ECON*3660

Economics of Equity Markets F15

0.50 credit weight

General Course Information

Instructor: Ilias Tsiakas

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Office Location *MacKinnon 737*
Office Hours Monday 3:30-5pm (or by appointment)
Department/School Department of Economics and Finance

Course Description

This is a third-year finance course that focuses on financial investments. The course builds on the material covered in the second-year course on Theory of Finance. Specifically, we will take an in-depth look into the theory, application and real-world evidence of how financial markets work. Our point of view will be that of an investor, which defines the field of finance known as asset pricing. Everything we will do in this course is about understanding and analysing real-world problems in asset pricing. Hence this course will have practical value to you whether you end up being a sophisticated professional investor or not.

Here is a sample of the questions we will address in this course:

- *How do financial markets work?*
- *How did financial assets perform in our recent history?*
- *What determines the price of financial assets such as stocks and bonds?*
- *How can we build optimal portfolios and diversify risk?*
- *How do we measure risk and return? How is risk related to return? Are there ways to maximize our return, minimize our risk or both?*
- *Is the stock market predictable?*
- *What are derivatives and how do we value them?*
- *Should we invest at home or abroad?*

We will address these questions by designing lectures that focus on three aspects: building rigorous theory that provides our conceptual foundation; solving numerical problems so we can understand the calculations involved; and looking at the empirical evidence to see whether our theories actually work in the real world.

Finance is a quantitative subject. Therefore, to study finance we need to use some (rather basic) mathematics and statistics. However, we will do our best to keep the level of mathematical complexity to a minimum, and explain new concepts from first principles. Finance is not a “spectator sport” and students are expected to develop the set of quantitative skills that will allow them to solve finance problems. The best

way to absorb the ideas explained in the lectures is by "learning-by-doing". Therefore, at the beginning of every topic, we will distribute a problem set. Students are expected to work out the problems on their own before we discuss them in class so they can participate in the class discussion. Students are also encouraged to solve more problems on their own from the end of the assigned chapters.

Indicative Content

LECTURE TIMETABLE

INTRODUCTION

- Course Outline

TOPIC 1: ASSET VALUATION

- Financial Markets and Instruments
  - Asset classes: stocks, bonds and currencies
  - Price vs. return
  - A statistical description of risk and return
  - Problem set 1

- Valuing Stocks
  - Initial Public Offerings (IPOs)
  - The dividend discount model
  - Market efficiency
  - Problem set 2

- Valuing Bonds
  - Prices, yields and valuation
  - The term structure of interest rates
  - Managing bond portfolios
  - Problem set 3

TOPIC 2: ASSET ALLOCATION AND ASSET PRICING MODELS

- Portfolio Theory
  - Diversification
  - Mean-variance asset allocation
  - Alternative trading strategies: 1/N strategy, size, value and momentum
  - Problem set 4

- Asset Pricing Models
  - The Capital Asset Pricing Model (CAPM)
  - Factor models; Arbitrage pricing theory (APT) and the Fama-French model
  - The Consumption CAPM (C-CAPM)
  - Volatility risk
  - The empirical evidence
  - Problem set 5

- Active Portfolio Management
    - Measuring performance
    - Market timing
    - Problem set 6

TOPIC 3: DERIVATIVES

- Call and put options
- Forward and future contracts
- Option valuation

TOPIC 4: INTERNATIONAL INVESTMENTS

- International diversification, home bias and foreign risks

FINAL REVIEW

- Final exam review and additional problems

Course Assessment

			Notes	Due Date
Assessment 1:	**20%**	Midterm Test 1	*Will cover Topic 1*	***Saturday Oct 17 9:30-11am***
Assessment 2:	**20%**	Midterm Test 2	*Will cover Topic 2*	***Saturday Nov 14 9:30-11am***
Assessment 3:	**20%**	Assignment	*To be distributed later*	***Friday Nov 20 5pm***
Assessment 4:	**40%**	Final Exam	*Will cover all topics*	***Saturday, Dec 12, 2:30-4:30pm***
Total	**100%**			

Notes:
The assignment will be done in groups. The groups can have a maximum of 5 students and a minimum of 1 student (i.e., students can choose to do the assignments on their own). Students are responsible for forming their own groups. More details will follow later.

The final exam will cover all the material taught in this course. Details on the format of the exam will be

provided later.

Course Resources

Recommended Texts:

"Investments" by Bodie, Kane, Marcus, Perrakis and Ryan. 8th Canadian Ed. McGraw-Hill Ryerson 2015

Other Resources:

All other materials, including lecture notes, will be posted on courselink or distributed in class..

Course Policies

Grading Policies

You will need medical or compassionate reasons to miss any of the graded events.

http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-grds.shtml

University Policies

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for

Academic Consideration:

http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Undergraduate Calendar:

https://www.uoguelph.ca/registrar/calendars/undergraduate/2015-2016/

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact the Centre for Students with Disabilities as soon as possible.

For more information, contact CSD at 519-824-4120 ext. 56208 or email csd@uoguelph.ca or see the website: http://www.csd.uoguelph.ca/csd/

Course Evaluation Information

Please refer to: https://www.uoguelph.ca/economics/course-evaluation

Drop date

The last date to drop one-semester courses, without academic penalty, is November 6, 2015**.** For regulations and procedures for Dropping Courses, see the Academic Calendar:

https://www.uoguelph.ca/registrar/calendars/undergraduate/2015-2016/

Course Learning Outcomes

The Department of Economics and Finance *Learning Outcomes* for this course are:

Skills:

1. ***Numerical Problem Solving*:** Students will learn how to value stocks, bonds and options, how to measure risk and return, how to design optimal portfolios, and how to solve other numerical problems in asset pricing.

2. ***Analytical Problem Solving*:** Much of the course is about interpreting the theory of asset pricing and making recommendations for individual investors and companies.

3. ***Problem solving in a Real World Context*:** All finance topics taught in this course relate to how investors and companies act in the real world.

4. ***Group Work*:** The assignment may be done in groups of students.

5. ***Computer Skills*:** The assignment will involve doing simple calculations on asset allocation using an Excel spreadsheet.

Knowledge:

1. ***Mathematical methodology*:** We will be using simple mathematical techniques to value stocks, bonds and options, measure risk and return and build portfolios.

2. ***Statistical and Econometric Methodology*:** We will be using simple distributions and will be computing descriptive statistics to help us understand the probability of certain future outcomes occurring. Distributions are central to assessing the risk-return tradeoff.

3. ***Understanding of Specific Markets*:** This course is devoted to understanding financial markets and in particular the markets for stocks, bonds and options, although other markets may be considered as well.

4. ***Historical and Global context*:** We will investigate the historical performance of global financial markets.

5. ***Financial Asset Pricing, Corporate Finance, and Risk Analysis*:**