ECON*4560 Advanced Topics in Finance W15
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General Course Information

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Office Location *MacKinnon 737*
Office Hours Tuesday 2-4pm (or by appointment)
Department/School Department of Economics and Finance

Course Description

This is an advanced finance course, which will cover a selection of topics in asset pricing. The objective of this course is threefold: (i) build a common background for all students in order to facilitate discussion of finance research; (ii) provide an in-depth look at a few selected core topics in finance, and (iii) expose students to the analysis of seminal research papers. This course is designed to provide in-depth analysis of few topics rather than superficial analysis of a wide variety of topics.

The delivery of this course will involve formal lecturing as well as class discussions and student presentations. About half of the course will be dedicated to formal lecturing and the other half to structured discussions focusing on a set of finance research papers. Students are strongly encouraged to participate and indeed lead the discussions to the extent that they can. In this course, the more interaction, the better the learning experience.

There is no required textbook for this course. The readings will consist of the lecture notes and a set of assigned papers for each topic. All materials, including lecture notes and assigned papers, will be posted on courselink or distributed in class.

Indicative Content

LIST OF TOPICS

REVIEW

- Measuring risk and return: mean, variance, standard deviation, covariance, correlation, autocorrelation, skewness, kurtosis
- The normal distribution and the lognormal distribution for modeling asset returns
- The empirical properties of asset returns: stocks, bonds and exchange rates
- Investor preferences: a comprehensive review of risk aversion

DYNAMIC ASSET ALLOCATION

- The foundations of portfolio choice and diversification

- Mean variance analysis: assumptions, strengths and weaknesses
    - Maximum Utility Strategy
    - Maximum Expected Return Strategy
    - Minimum Volatility Strategy
    - Global Minimum Variance Strategy
    - The 1/N strategy

- Performance Measures, Transaction Costs and long horizon investing

THE CROSS SECTION OF EXPECTED STOCK RETURNS

- A Review of the Capital Asset Pricing Model (CAPM)

- The Consumption CAPM

- Arbitrage Pricing Theory (APT)

- The Fama and McBeth (1973) methodology

- The Fama-French (1993) factors

- Alternative factors for explaining the cross section of stock returns:
    - Momentum factor
    - Volatility factor

RETURN PREDICTABILITY

- Out-of-sample prediction of the equity premium
    - Types of conditioning information: dividend yield, T-bill yield, term spread, default spread, consumption-to-wealth ratio, etc.

    - Short vs. long horizon

FX AND THE CARRY TRADE

- The Foreign Exchange market

- The forward bias in exchange rates

- The carry trade strategy

- The momentum strategy for currencies

Course Assessment

			Notes	Due Date
Assessment 1:	**10%**	In-class participation		
Assessment 2:	**20%**	Empirical project 1		***Thursday Jan 26***
Assessment 3:	**20%**	Empirical project 2		***Thursday Feb 26***
Assessment 4:	**20%**	In-class group presentation		***TBA***
Assessment 5:	**10%**	Written summaries of two research papers		***TBA***
Assessment 6:	**20%**	Final Exam	Take-home for 48 hours	**Thursday Apr 2; 4pm**
Total	**100%**			

Participation

Students are expected to attend all classes and actively participate in the discussions on both the lecture material and the student presentations. You participation grade will be based on both the quality of your participation and attendance. Attendance will be taken in every class. Lack of attendance will result in a penalty using the following rule. A student is allowed to miss three classes during the semester without an explanation and with no penalty. When a student misses a fourth class, there will be a deduction of 1% from the final grade for every missed class (counting the first three classes) up to a maximum of a 10% deduction. Perfect attendance may result in a bonus mark.

Presentations

Students will be divided in separate groups. Each group will be assigned one paper for their presentation. However, all students must read all the assigned presentation papers (including the papers assigned to your classmates) so that we can have a discussion after each presentation.

The in-class presentation involves writing about 10-15 PowerPoint slides. The slides will be submitted to the instructor in class right before the presentation in a USB stick. Students will receive a grade based on the quality of their presentation and the quality of the slides. For the slides, what counts is the content not how fancy their design is. A simple PowerPoint design will be just fine. You should aim to talk for a maximum of 40 minutes (but no less than 20 minutes). A class discussion will follow each presentation.

Your presentation should focus on the following:

- Discuss the objectives of the paper
- Set the paper in context, by discussing whether this is an important subject
- Describe the data and methods
- Present the results and implications.

You can also spend a few minutes doing your best to analyze the paper:

- Indicate the strengths and weaknesses of the paper
- Say what you may have done differently and why
- Speculate on what research needs to be done next.

However, if you do not have strong opinions about the above three bullet points, you can ignore them.

The best presentations are the ones that use simple language to describe the main ideas of the paper in a clear and precise manner that makes sense to everyone, even those who have not read the paper. *Think of your presentation as teaching the paper to your classmates*. So what you need to emphasize is whether the paper makes sense, whether the question is important, whether the results support the question and, in the end, whether we should care.

Written summaries of papers

Each student will be assigned two research papers among the ones that will be presented in class for which they will write a summary. Each summary will have maximum length of one page, and will contain: (i) one paragraph describing what the paper does (you can use bullet points here); (ii) one paragraph listing the main findings of the paper (you can also use bullet points here); and (iii) one question addressed to the student who will be presenting this paper. The question can be about: so, is the topic of the paper interesting? Is the methodology appropriate? Do the authors find strong support for their hypothesis? Why should we care about this result?

Advice on how to read papers

When reading a paper, start with the abstract, introduction and conclusion. Try to obtain a general understanding before diving into the technicalities. There are many points in papers which are difficult to understand either because of the techniques (math or econometrics) or because of the sophistication in the economic ideas. Do not get hung-up on small details, but try to see the "big picture". Do not worry if you do not understand all the details of the methodology. If you are presenting a paper, you should try to understand as much as you can. If you cannot understand something, say so in your presentation. It could very well be that the paper is not clearly written or simply that the quantitative sophistication of the paper is beyond the level of this course.

Empirical Projects

Students are required to work in groups on two empirical projects. Guidelines for these projects will be discussed in detail later. For now what we can say is that the projects will involve some of the following:

- Collecting data for different types of assets (e.g., stocks, bonds, commodities or currencies) over a long time period.
- Using Excel to compute and report descriptive statistics on the data: means, variances, standard deviations, minima, maxima, skewness, kurtosis, serial correlations, cross-correlations, etc.
- Use these statistics to assess the risk-return tradeoff on the assets.
- Design a simple trading strategy for allocating wealth across these assets.
- Report and discuss the performance of the strategy.

In order to do these projects students will receive some training on how to download data from the Reuters-Datastream terminals located in the library. We will also do some examples in class.

Final Exam

The final exam will cover all the material taught in this course. Students will be asked to write one essay on one of the topics discussed in class. It will be a take home exam which will be given to you in advance and will be due on the last class on **Thursday April 2, 2015**. More details on the format of the exam will be provided later.

Course Resources

Recommended Texts:

There is no set textbook for this course. Students are expected to study the lecture handouts and the assigned papers. For further information on a number of topics, students can refer to numerous textbooks such as the following:

"*Financial Economics*" by Fabozzi, Neave and Zhou, 2012. (intermediate level)

"*Asset Pricing*" Revised Edition, by John H. Cochrane, Princeton University Press, 2005. (advanced graduate level)

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:

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

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 the Course and Instructor Evaluation Website

Drop date

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

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

Course Learning Outcomes

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

Skills:

1. ***Written Communication*****:** The empirical projects will provide an opportunity for students to conduct empirical analysis that evaluates an asset allocation strategy. Another type of written communication used in this course is the one-page summaries of research papers and the take-home final exam.
2. ***Oral Communication/Presentation*****:** The presentation of a research paper will provide students with an opportunity to present to the class their summary and evaluation of a major research paper.
3. ***Numerical Problem Solving*****:** Students will learn how to measure risk and return, how to design optimal portfolios, how to prove certain asset pricing models, and how to solve other numerical problems in asset pricing.
4. ***Analytical Problem Solving*****:** Much of the course is about interpreting the theory of asset pricing and making recommendations for individual investors and companies.
5. ***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.
6. ***Computer Skills*****:** The empirical project involves developing substantial skills in downloading and processing data, as well as in performing graduate-level statistical analysis using statistical packages.

Knowledge:

1. ***Mathematical methodology*:** We will be using mathematical techniques to measure risk and return and build portfolios.
2. ***Statistical and Econometric Methodology*:** We will be using probability 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 and bonds, although other markets will 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*:** This is just a summary of what this course is about.