Econ 372/572   **Intermediate Finance**   **Fall 2013**

T/Th 11:45 – 1:00, Soc Sci 139
Emma Rasiel
Office Hours: [TBD]
Email: ebr4@duke.edu

SYLLABUS

COURSE SYNOPSIS

The goal of this course is to provide a framework for understanding the key theoretical and practical models used in the financial world. After introducing some basic pricing and valuation tools, we will address how to use these tools to provide a foundation on how financial assets are priced in the marketplace. We will go on to examine the tradeoffs between risk and return, and explore optimal portfolio selection and analysis.

CLASS MEETING TIMES AND FORMAT

Classes will be in a lecture format, but I encourage students to ask questions and to challenge ideas and concepts that are introduced. I will hold weekly office hours, and will also be available at other times by appointment.

Class attendance is *essential*, as much of the material that we will cover is not in the (optional) textbook, and the lecture handouts by themselves are not sufficient to understand the material fully. Repeated absence from class is likely to have a negative impact on your grade, as I will count *anything* that I say in class to be fair game for questions in problem sets and exams.

Most Sunday evenings, I will offer an optional review session from 5:30pm – 6:30pm in Soc Sci 139. These sessions should be viewed as an opportunity to review material that students are struggling with. They are *not* intended as a way to get a quick overview of all that was covered in class the previous week, and should be viewed as an addition to, not a replacement for, attending lectures.

TEXTS:
Lecture Notes: Will be posted on Sakai
Brealey and Myers: *Principles of Corporate Finance* OPTIONAL

ASSIGNMENTS, PROJECTS, EXAM AND GRADING:

Your grade for this course will be based on a combination of 6 problem sets (35%), 3 team projects (30%), and a final exam (35%). There will also be an opportunity to earn up to 2% *extra credit* by taking the *optional* 2-hour Bloomberg Aptitude Test (BAT), which will be offered on Sunday, October 27.

Team Projects: Case Studies and Competitions
The team projects will require students to work in teams of 3. Two of these are **mandatory case studies** for all students:
- *Tide Laundry Detergent* from Procter & Gamble
- *Skinnygirl Acquisition* from Beam Global

There are two other team-based **competitions** – these are also open to undergraduates outside of Econ 372/572. Each student in Econ 372/572 must select at **least *one* of these two** competitions:

- An *Equity Research Report competition* sponsored by Barclays Capital
- An *Asset Allocation competition*, sponsored by BlackRock.

Your team's grade in the team-based activities will count towards your overall course grade. (If you choose to participate in both the Barclays Equity Research Report competition *and* the BlackRock Asset Allocation competition, your highest team grade from these two competitions will count towards your overall course grade.)

Please note the following about the *Barclays Equity Research* and *BlackRock Asset Allocation* competitions:

- You may form different teams for whichever of these two competitions that you participate in.
- These two competitions are open to *all* Duke sophomores and juniors, not just students in Econ 372. Hence **sophomores and juniors in Econ 372 may form teams with other sophomores & juniors who are *not* in this class**, and in fact are encouraged to do so.
- *Seniors and MA students* may only form teams among themselves; that is, they may not form teams with any sophomores or juniors, and may only form teams with students registered in Econ 372/572.

Problem Sets
There will be seven (6) problem sets over the course of the semester, which will typically be posted on Sakai on Thursdays, to be handed in at the beginning of the next Tuesday class. (Note that the team projects are not always due on a Tuesday – check the Course Schedule below for details of submission dates for the team projects.)

Problem sets may not be handed in late under *any* circumstances. I understand that there may be exceptional circumstances relating to illness, family emergency, etc. that may prevent you from being able to submit every problem set on time. For this reason, I will drop the lowest problem set score for each student before calculating final grades for the class. Please only use this "free pass" if you really need it!

While I encourage students to collaborate on problem sets, each student must hand in his or her own completed version. If you work with others on the problem sets, bear in mind that the final exam is based on independent performance, which should temper your desire to 'free-ride' on problem sets, rather than participating actively in the group effort.

Be aware that *accuracy* is an important component of the grade received on all problem sets, projects, and the final exam. In other classes, you might lose just one mark if you use the right method but make a numerical error and arrive at the wrong solution. You should not assume that this type of grading policy will apply in *this* course. Clear and lucid presentation of your solutions will also work in your favor.

Some problem sets, as well as the competitions, will necessitate the use of the spreadsheet software Excel. If you are unfamiliar with Excel, this will be an excellent opportunity to get some experience with it. It is used throughout the business world, and especially in finance/economics/accounting-related fields.

Bloomberg Aptitude Test (BAT)

The BAT is a general finance knowledge test, utilized by students to demonstrate their interest in and knowledge of the financial markets; and by employers in the financial markets as an incremental measure of a candidate's suitability for a particular role. The test is multiple choice, takes two hours, and covers a range of topics such as Economics, News Analysis, Analytical Skills, and Chart and Graph Analysis. The test will be offered at Duke on Sunday, October 27 from 1pm – 3pm in Soc Sci 136. Students' scores in this optional exercise have the potential to increase their overall grade in the class by up to 2%. Since I do not "curve" the grade for this class, you cannot _hurt_ your overall grade by choosing not to participate in the BAT test – however, you _can_ improve your grade by taking the test and performing well relative to your peer group (other students in the class who choose to take the BAT).

I will make a large sample of BAT test questions available as we get close to the BAT test date. You can also learn more about the BAT on the web, at http://about.bloomberginstitute.com/

Final Exam

The final exam for the course is cumulative, and will take place on the date and time specified on the university exam calendar: **at 9am – 12pm on Tuesday, December 10 in our regular classroom.**

REGRADE POLICY

I will only accept requests to regrade a problem set if you believe that your true grade is more than 4% higher than your written grade on that problem set. That is, I actively discourage "grade grubbing". You should also be aware that if you submit a problem set for a regrade, I will regrade the entire problem set, and that this has potential to result in a reduction of the homework grade, if I think that the grader has been too generous in any of the marks awarded.

Any regrade requests should be submitted, in writing, within 7 days of the problem set being returned to you.

COURSE SCHEDULE

Time Value of Money and Net Present Value Analysis

The Time Value of Money. Basic financial statements analysis and Net Present Value for Discounted Cash Flow (DCF) valuation.

PROCTER & GAMBLE CASE STUDY – TIDE LAUNDRY DETERGENT
This is a team case study: students work in self-selected teams of three.
Case Study: (due Sep 10)
Sep 10: Visiting Lecture: John Walker, Procter & Gamble

Equity Securities

Common stock valuation. The stock market. Comparables analysis. Price/Earnings ratios and other relevant financial ratios.
Problem Set 1 (due Sep 17)

Introduction to Portfolio Theory

Review of essential microeconomic concepts: utility and risk aversion. Potential violations of "standard" economic preference models. Review of essential statistics: return, standard deviation, correlation, covariance, and variance-covariance matrices. Portfolio risk, return and diversification for two assets. Efficient frontier and diversification for portfolios of multiple assets. Capital Market Line (CML). Single and multi-factor linear regression models.
Problem Set 2 (due Sep 24)

BLACKROCK ASSET ALLOCATION COMPETITION: (*SELECT EITHER THIS OR BARCLAYS*)

Competition registration deadline, Friday, September 20. This competition is open to **all** Duke sophomores and juniors, regardless of whether they are registered in Econ 372.
- Sophomores and Juniors will register online for the competition, and are welcome to form teams with sophomores and juniors who are not in Econ 372.
- Seniors and MA students do not need to register, and may only form teams with other seniors and MA students enrolled in Econ 372/572
- Competition guidelines available to all students on Tuesday, September 24.

Deadline for report submission: **Wednesday, October 9 at 12pm**
- Sophomores and Juniors will submit multiple copies, following directions on the competition website, to be considered for the Panel Presentations with BlackRock
- Seniors and MA student teams will submit one copy of their research report to Professor Rasiel, and are not eligible to present at the BlackRock Panel.

BARCLAYS CAPITAL EQUITY RESEARCH COMPETITION: (*SELECT EITHER THIS OR BLACKROCK*)

Competition registration deadline, Wednesday, September 25. This competition is open to **all** Duke sophomores and juniors, regardless of whether they are registered in Econ 372.
- Sophomores and Juniors will register online for the competition, and are welcome to form teams with sophomores and juniors who are not in Econ 372.

- Seniors and MA students do not need to register, and may only form teams with other seniors and MA students enrolled in Econ 372/572
- Competition guidelines available to all students on Friday, September 27.

Deadline for report submission: ***Thursday, October 17 at 12pm*** *(immediately after Fall break)*
- Sophomores and Juniors will submit multiple copies, following directions on the competition website to be considered for the Panel Presentations with Barclays
- Seniors and MA student teams will submit one copy of their research report to Professor Rasiel, and are not eligible to present at the Barclays panel.

Bloomberg Aptitude Test (BAT) *Sunday, October 27, 1pm – 3pm [location TBD]*

Optional: students achieving above a certain score in this optional test will earn a 2% increase in their overall course grade.

Bond Markets

Bond prices and yields. Forward rates. Duration, convexity, and hedging. The term structure of interest rates and theories of the yield curve slope. Risk management in the fixed income markets.
Problem Set 3 (due Oct 22), Problem Set 4 (due Oct 29)

BEAM GLOBAL CASE STUDY – THE ACQUISITION OF SKINNYGIRL
This is a team case study: students work in teams of three.
Case Study: (due Nov 5)
Nov 5: Visiting Lecture: Bob Probst, CFO Beam Global

Capital Asset Pricing Model (CAPM)

Capital Asset Pricing Model: derivation. Systematic versus idiosyncratic risk. The Security Market Line and its relationship to the CML.
Problem Set 5 (due Nov 12)

Performance Measurement

Portfolio management. Performance measurement using benchmarks. Caveats to performance measurement. Luck vs skill. Hedge fund and mutual fund performance.
Problem Set 6 (due Nov 19)

Final Exam
Tuesday, December 10, 9am – 12pm