University of Guelph College of Management and Economics DEPARTMENT OF ECONOMICS AND FINANCE

ECON*3660 Economics of Equity Markets Winter 2012

Instructor: F. Tapon,

Room 738 MacKinnon, Ext. 52657, email: francistapon@gmail.com

Lecture: Tues., Thurs. 4:-5:20pm

Office Hours: Monday and Wednesday: 3.00pm to 5.00pm.

Tuesday and Thursday: 2pm to 3.45pm.

It is your responsibility as a student to be aware of and to abide by the University's policies regarding academic misconduct, e-mail communication, maintaining copies of out-of class assignments, what to do when you cannot meet a course requirement and the drop date for this

semester. To better understand these policies, visit:

http://www.economics.uoguelph.ca/student-responsibilities-policies.asp

I will start with these quotes from Ben Graham and one from Warren Buffett that describe my investing philosophy:

"...there is a special paradox in the relationship between mathematics and investment attitudes on common stocks, which is this: Mathematics is ordinarily considered as producing precise and dependable results; but in the stock market the more elaborate and abstruse the mathematics the more uncertain and speculative are the conclusions we draw therefrom. In forty-two years of Wall Street experience and study I have never seen dependable calculations made about common-stock values, or related investment policies, that went beyond simple arithmetic or the most elementary algebra. Whenever calculus is brought in, or higher algebra, you could take it as a warning signal that the operator was trying to substitute theory for experience, and usually also to give to speculation the deceptive guise of investment."

Benjamin Graham, <u>The Intelligent</u> <u>Investor</u>, 4th revised edition, Harper Business, 1973, p. 321.

"...every corporate security may best be viewed, in the first instance, as an ownership interest in, or a claim against, a specific business enterprise. And if a person sets out to make profits from security purchases and sales, he is embarking on a business venture of his own, which must be run in accordance with accepted business principles if it is to have a chance of success."

Benjamin Graham, <u>The Intelligent</u> <u>Investor</u>, op. cit., p. 286.

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"The speculative public is incorrigible. In financial terms it cannot count beyond 3. It will buy anything at any price, if there seems to be some 'action' in progress. It will fall for any company identified with 'franchising', computers, electronics, science, technology, or what have you, when the particular fashion is raging."

Benjamin Graham, <u>The Intelligent</u> <u>Investor</u>, op. cit., p. 245.

"Wall Street has its reasons that the reason doesn't understand." A paraphrase on Pascal by Benjamin Graham, **The Intelligent Investor**, op. cit., p. 216.

"To invest successfully, you need not understand beta, efficient markets, modern portfolio theory, option pricing or emerging markets. You may, in fact, be better off knowing nothing of these. That, of course, is not the prevailing view at most business schools, whose finance curriculum tends to be dominated by such subjects. In our view, though, investment students need only two well-taught courses- How to Value a Business, and How to Think About Market Prices.

Your goal as an investor should simply be to purchase, at a rational price, a part interest in an easily-understandable business whose earnings are virtually certain to be materially higher five, ten and twenty years from now. Over time, you will find only a few companies that meet these standards- so when you see one that qualifies, you should buy a meaningful amount of the stock. If you aren't willing to own a stock for ten years, don't even think about owning for ten minutes. Put together a portfolio of companies whose aggregate earnings march upward over the years, and so also will the portfolio's market value."

Warren Buffett. Berkshire Hathaway Chairman's Letter- 1996, p.13.

COURSE OUTLINE

Textbook:

Investment Analysis and Portfolio Management. 1st Canadian Edition by Reilly, Brown, Hedges and Chang (hereafter RBHC 1cdne), Nelson, 2010.

This course surveys some of the economics literature on the determination of security prices and the operation of the stock market. We will review recent developments in portfolio theory which explain investors' portfolio choices, we will outline the principles needed for analyzing common stock prices; we will study portfolio management, the evaluation of portfolio performance and international investing. The recent (and, in my opinion, still ongoing) crisis has proven that much finance theory dealing with risk-return and market efficiency needs to be rebuilt-a job that will occupy YOUR generation. When it comes to investing in equities academics value complexity when none is needed nor desirable (now re-read the quotes from Graham and Buffett at the top of this outline!). As a result, I will spend as much of our time as we can afford studying behavioral finance. We will **not** learn how to make a bundle and retire at age 25, but what you learn in this course will make you better investors. The course very much has a **value investing bias** and deals **specifically and exclusively with common stocks.**

The course will consist of three hours of lectures every week spread over two classes. At various points in the semester we will host 3 or 4 senior finance practitioners.

1. **Grades** will be determined as follows:

- Two exams worth 20% each
 Midterm Exam is on Thursday February 9th in class.
 Final is on Thursday April 19th 8.30am to 10.30am (sorry about that; I had nothing to do with this choice).
- 2. First Security Analysis Report, due, Feb. 16th, 2012 20%
- 3. Group presentation on your Investment selections (5 minutes per group of two) 20%

Tuesday, March 27th	Groups 1-13
Thursday, March 29th	Groups 14- 27
Tuesday, April 3 rd	Groups 28-41
Thursday, April 5th	Groups 42-50.

4. Final Portfolio Report with Peer rating form, due Thurs. Apr. 5th 20%

Please note that both exams are compulsory. I will give an opportunity for rewriting the midterm only to those students who have a medical emergency (with a certificate signed by a medical doctor) or for compassionate reasons (with the proper U of G documentation from counselors). Without this documentation the grade for a missed midterm is zero. You are allowed to bring to the exam room the course textbook and your course notes ONLY.

Course Evaluation: You will be asked to complete an evaluation of this course at some time during the last two weeks of the semester. The department of Economics policy regarding the conduct and use of these evaluations will be found at:

http://www.economics.uoguelph.ca/course-evaluation.asp

2. Portfolio Management Exercise

In order to make you practice what we learn in this course, you will all participate in a **portfolio management exercise** using <u>www.globeinvestor.com/watchlist</u>. For this exercise, you will form portfolio management groups of **two students**. You will start investing a fictitious (sorry about that) \$100,000 on Monday January 23rd. This exercise lasts 9 weeks to March 23rd.

Your group of two will invest in, and keep track of, **1 stock** (yes, you read this right: ONE stock) **and 2 ETFs that I will assign to you.** I am the stock picker. I will match each group of two students to a list of 50 stocks posted on Course Home. I will post on Course Home this list of stocks and two to four ETFs with group numbers. Once you know your group number refer to this list and get going! Your team will keep track of your portfolio on www.globeinvestor.com/watchlist and you must include photocopies of the printouts in your two reports (Feb. 16th, and Apr. 5th, 2012). Each team has \$100,000 to invest so you will have to agree on how to allocate your scarce money between the 1 stock and 2 ETFs. Here are the steps you must follow for this part of the course:

- 1. Register your group and your portfolio on www.globeinvestor.com/watchlist.
- 2. Each group of two students is assigned ONE stock and two ETFs. These stocks and ETFs are traded on the TSX, NYSE/Amex and Nasdaq.
- 3. In the final presentations at the last two weeks of the semester you will use the information from your Globe Investor Watch List to show the class how your portfolio of 1 stock and 2 ETFs fared during these 9 weeks. I don't expect miracles; value investors invest for decades before seeing the results of their wisdom, or as Warren Buffett says "my horizon is forever". Later in the semester, I will explain what performance measure I expect you to calculate to evaluate your performance.

• Portfolio Report 1 due February 16th, 2012.

In this report of FIVE pages maximum (use double-space; Georgia font; size 12), plus appendixes where appropriate each student in a group of two plays a different role. You will follow an approach used very successfully by PIMCO, a famous money management firm based in Newport Beach, California (PIMCO calls this their "culture of constructive paranoia") and do a "premortem analysis" (this a technique invented by Gary Klein-google him) of why the investments you are contemplating failed. In other words, one of you will pretend that you have seen the future and these investments failed. For the first report due on February 16th one of you will write the reasons why they failed and the other will argue that they were a success. Or put another way, for the first report one team member will argue FOR the stock pick and the two ETFs, the other member of the team will

argue AGAINST. In this first report, you will cover topics 1 (business model), 2 (value proposition), and 3 (competitive analysis using Porter's 5 Forces model) from the template I give you on page 9 of this course outline. The student taking the "con" view will state his thinking on topics 2 (value proposition) and 3 (competitive analysis) and integrate his/her material with his/her colleague who takes the "pro" side.

• Portfolio Report 2 due April 5th, 2012.

In this report of 10 pages maximum plus appendixes where appropriate (use double-space; Georgia font; size 12) you will follow exactly the template on page 9 (sections 1-9). You will need to rewrite, somewhat, sections 1-2-3 in light of my comments on your first report. See pp.11-12 for a list of useful websites to obtain free investment information. Of course talk to me when you need help!

I would like to make a few important points about the portfolio management exercise:

- 1. Although earning a superior return over the 9 weeks that the exercise lasts is rewarding, this is <u>not</u> what I am looking for. I am assigning to you one stock and two ETFs so that you learn how to be <u>long-term</u> investors. This means that you have to develop such qualities as independent thinking, patience, organization, courage of your convictions, and above all discipline. Professionals do not buy stocks on a whim; they analyze them thoroughly and then buy them at the appropriate moment (or as Tony Arrell, the CEO of Burgundy Asset Management that you will meet later this semester says "you build your dream team and when the stocks are 'on sale' you back up the truck"). Thus, I will not grade you on results, but on the quality and depth of your analysis. Read this sentence again and think about it!
- 2. Your analysis **must be** rigorous and convincing. **Do not cut and paste from professional security analysts' reports**. There is a strong probability that I too have read them and that I do not like them. Cutting and pasting is considered to be plagiarism. At Guelph the penalties for this are severe. So don't take chances and ruin your future in this wonderful industry for the sake of a trivially higher grade (to reinforce this point I will tell you that when HR people call me about one of my former students to obtain a reference they almost never ask about the grade my former student received; they ask FIRST about their ethics, reliability and punctuality). Read Appendix C on the text website.
- 3. I expect that each member of your group will participate EQUALLY in the work done in this course: analyzing your stock and ETFs, presenting your work to the class, and writing the two reports. Each member of your group will receive the same grade for all group work unless I am advised in the peer rating form that each group will file with me at the end of the semester, that the other member did not pull his/her weight. In that case this student's grade will be adjusted downward. Please come and discuss with me any group problems as soon as they occur. You may also, after discussing it with me, fire the non-performing member. In this case, this student may end up on his/her own. See p.11 for more information on "How to fill the Peer Rating Form."

I. INTRODUCTION

Week 1: The practical lessons of history and some institutional background

Jan 10, 12 RBHC 1cdn ed, Chapters 1, 4.

Form your portfolio management groups: 2 students per group. Send me the names or give them to me in class using the form in this course outline. **This is due January 12**th.

II. <u>INVESTMENT TECHNOLOGY: Portfolio Theory and Risk-Return</u> Models

Week 2: How to reduce risk? Diversification and portfolio analysis

Jan 17, 19 RBHC 1cdn ed, Chapter 6.

By now I have posted on Course Home group numbers and the one stock and two ETFs that each group will study. In class I will assign a group number to each pair of students in the class. You may ask me to assign to you a particular group number because you are interested in the stock attached to that group number.

Week 3: How to model risk? The CAPM and the APT.

January 24, 26 RBHC 1cdn ed, Chapter 7.

The **portfolio management exercise begins on January 23rd**. For the first report one member of each team takes the pro side; the other takes the con side for each of the stock and two ETFs. You have registered your stock and ETFs on www.globeinvestor.com/watchlist

Week 4: Market Efficiency and what this means for the behavior of stock prices

January 31st, RBHC 1cdn ed, Chapter 5, pp.105-121; pp123-127. February 2

Week 5: The Inefficient Stock Market and Behavioral Finance

Feb 7, 9 RBHC 1cdn ed, Chapter 5, pp.121-123.

Midterm February 9th in class on Chapters 1, 4-5 (to page 121; including pp.123-127), 6-7.

Week 6: **Behavioral Finance and Value Investing**

Feb 14, 16 RBHC 1cdn ed, Chapter 5 pp.121-123 as well as class notes

First Security Analysis Report due Feb. 16th, 2012. In this report each team of two will describe in a maximum of 5 pages each:

Business model of your stock and two ETFs (there is only "con" here). **Value proposition** of your stock and two ETFs (both "pro" and "con").

Competitive analysis of your stock and two ETFs: here is your chance to show me that you learnt something in Econ 4800 Strategic Management (Porter's 5 Forces model, core competencies) if you have taken the course. Has the business built deep "moats" around its business? Are these "moats" deep, and filled with man/woman eaters? How long-lasting are they?

Week 7: Winter Break

III. SECURITY ANALYSIS AND STOCK VALUATION

Week 8: Fundamental analysis and common stock valuation: Theory and practice.

February 28, RBHC 1cdn ed, Chapters 8-9, Web Chapter 19. March 1

Week 9: More on common stock valuation

RBHC 1cdn ed, Chapters 8-9, Web Chapter 20. Mar 6. 8

IV. INVESTMENT STRATEGY

Week 10: Investment planning and investment performance evaluation.

RBHC 1cdn ed, Chapters 15 (skip Appendix pp. 488-489), 17-18. Mar 13, 15

Week 11: International diversification

RBHC 1cdn ed, Chapter 3 and class notes. Mar 20, 22

Portfolio management exercise ends March 23.

Week 12:

Mar 27 Investment Project Presentations: 5 minutes maximum per

group; no questions.

Peer rating forms are due with your final portfolio report.

GROUPS 1-13.

Mar 29 Investment Project Presentations: 5 minutes maximum per group; no questions.

GROUPS 14-27.

Week 13:

Apr. 3 Investment Game Strategy Presentations: 5 minutes maximum per group; no questions.

GROUPS 28-41.

Apr.5 Investment Game Strategy Presentations: 5 minutes maximum per group; no questions.

GROUPS 42-50.

Final Portfolio reports are due (please follow **EXACTLY** the format on p.9 of this course outline) on April 5th. Peer rating forms are due at the same time (one form per group, signed by **both** members).

Final exam is April 19th 8.30am to 10.30am in on Chapters 5-6-7, 15, 17-18.

FORMAT FOR Portfolio Management EXERCISE REPORTS

- 1. Business Model (what does this firm do?)
- 2. Value Proposition (what makes this firm different from its competitors?)
- 3. Competitive Analysis (use Porter's 5 Forces model). How deep are the "moats" around its businesses? How secure and long lasting are they?
- 4. Quality of Management:
 - 4.1 The Board's composition and independence
 - 4.2 Do managers act with integrity and intelligently?
 - 4.3 Is management candid with its shareholders?
 - 4.4 Does management allocate capital rationally?
 - 4.5 Does management have "skin in the game"?
- 5. The numbers: Dividend per share in cents, Dividend yield, growth in dividends, dividend "aristocrat"? Price/Book, Price/Earnings; ROE, Margins, Leverage (Debt/Equity), Fixed Coverage. Compare these numbers with the competition.
- 6. Intrinsic Value using Free Cash Flows. Is there a margin of safety? How cheap is the stock? Remember this pearl of wisdom from Warren Buffett: "It is far better to buy a wonderful company at a fair price than a fair company at a wonderful price." Show this information in a table. To calculate intrinsic value and the margin of safety run 3 scenarios: optimistic, normal, pessimistic. For the cost of capital use the long term Canada 10 year bond rate. Use a two-stage Free Cash Flow discount model.
- 7. ETFs? Risk-return statistics in a table.
- 8. Portfolio Performance compared to Benchmark (since we are Canadians the TSX-S&P Composite index). Use the Sharpe ratio.
- 9. Conclusions / Pearls of Wisdom / Lessons Learnt.

Notes:

- 1. for the first report due February 16th write ONLY to the first three sections in the outline above. The member of the team that takes the opposite view should focus his/her write-up on the value proposition and competitive analysis. This report must be no more than 5 pages plus a few exhibits.
- 2. for the final report due April 5th you must give me your write-up on the entire template and omit the "con" side. Your report must be no more than 10 pages plus exhibits.
- 3. Show me your calculations for intrinsic value and for the Sharpe ratio in the exhibits.

WHAT I AM LOOKING FOR IN GROUP PRESENTATIONS

Speaking effectively and forcefully in front of a public is one of the most important skills needed by business executives who aspire to senior positions. An effective presentation explains, clarifies and inspires. Here are some guidelines outlining things I look for in a group presentation:

- 1. How does the group look? Do they look professional or sloppy?
- 2. Have they introduced themselves to the audience, so that we know who is who? (I want to see your names **3 times**: 1 when you introduce the members of your group; 2. in the presentation outline next to the topic that you will be discussing; 3. on each of your slide).
- 3. Do they have an outline of their talk, so that we understand clearly what they are trying to achieve?
- 4. Do the members maintain eye contact with us in the audience, as if they were speaking to each of us individually?
- 5. Is their voice lively and clear, or monotonous and dull?
- 6. Is the presentation visually attractive, unusual, clever, so that our attention is engaged all the time and we retain most of their message?
- 7. Do they present the material and the message slowly and clearly? Do they make effective use of course concepts? Is the presentation interesting and meaningful?

WHERE TO GET FREE INVESTMENT INFORMATION

- 1. www.globeinvestor.com
- 2. www.canoe.ca
- 3. www.sedar.com
- 4. www.edgar-online.com
- 5. <u>www.hoovers.com</u>
- 6. www.bloomberg.com
- 7. www.zacks.com
- 8. www.wallstreetcity.com
- 9. www.bigcharts.com
- 10. www.stocktools.com
- 11. www.iqc.com
- 12. www.traders.com
- 13. www.turtletrader.com
- 14. www.vectorvest.com
- 15. For information on betas look up www.reuters.com
- 16. For information on Canadian companies' betas and financials look up: www.fpinfomart.ca
- 17. For information on short interest: www.TSX.com and www.bloomberg.com
- 18. For Insiders' Trading Reports: www.SEDI.ca
- 19. For information on management: www.zoominfo.com
- 20. For information on management: www.corporateinformation.com
- 21. For Insider ownership for US-listed companies: SEC filings Schedule 14A.

- 22. For information and clarification on SEC filings: www.footnoted.org
- 23. For information on insider trading: www.inkresearch.ca

24. For critical views on Media: www.tvnewser.com

on Pharma: www.corante.com/pipeline and

www.pharmagossip.blogspot.com

on Finance: www.wallstreetfolly.com and www.dealbreaker.com

on Airlines: www.planebuzz.com

on Retail: www.walmartwatch.com/blog

on Tech: www.calacanis.com and www.fakesteve.blogspot.com

How to fill the **Peer Rating Form**

(this is due with your final report)

- 1. Ideally, your group functioned well and you shared the work load (the two reports in the portfolio management exercise and the final presentation) equally, i.e. in a group of 2, you assigned each other 50%.
- 2. In cases where the work load was <u>not</u> shared equally, the student who has the highest percentage will receive the <u>unaltered</u> total mark for the two portfolio reports and group presentation. The other student, who has not shared equally the work load, will receive a <u>discount</u> from the assigned grade. The discount is calculated as follows.

For example, assume the following effort distribution:

Student 1 70% Student 2 30%

Student 1 will receive his/her full unaltered grade for the portfolio reports and the final presentation. Student 2 will receive 30%/70% of the full unaltered grade. In other words this is NOT a zero-sum game where the student who has the 70% weight wins the points lost by the student who has the weight of 30%. Make sure you understand how this works!

3. Each student in the group must sign the group sheet and return it to me with your final portfolio report.

PEER RATINGS ECON*3660 ECONOMICS OF EQUITY MARKETS

(due with your final portfolio report)

GROUP NUMBER:			
RATINGS:			
If your grade for group work is a 1 the amount of work done by each each member participating equal 100%. Please file one form per gragreement. Read my explanations	group member? <u>y</u> would receive a <u>oup</u> . Each meml	For example, in a mark of 50%, for our must sign this f	group of 2, a total of form to show
<u>Names</u>	<u>Mark</u>	<u>Signature</u>	
1			-
2			_
COMMENTS:			

Membership in your group (hand this to me January 12th). I will give you your
group number that will determine which stock and ETFs you will study.
1
2