



*Interesting Supplementary Reading:*

Malkiel, B., **A Random Walk Down Wall Street**, W.W. Norton & Co.

Graham, B., **The Intelligent Investor**.

Graham, B., **Security Analysis**.

Globe & Mail – ROB, Financial Post, Wall Street Journal, Barrons, Economist

*Interesting Online Resources:*

You can register with Morningstar for free. Lots of info on mutual funds and ETF's. Morningstar Insight emails, blogs and podcasts.

Canadian Investment Review (Electronic journal in Library)

Financial Analysts Journal (Electronic journal in Library)

NOTE: There is a required enrollment in Stock Trak for \$27.95 per team of two people (2, not 1 nor 3 per team). Registration info below.

**Grading**

Two Problem Sets – Group Work	6% + 3%
Economic Forecast Assignment – Individual Work	8%
Stock Trak Trading Project – Group Work	8%
Midterm Test	30% or 10%
Final Examination	45% or 65%

**Problem Sets – Group of Two (2)**

Two (2) problems sets are to be done in groups of two. Problem sets are due (in hard copy) at the start of the classes shown in the course schedule. Should you arrive late, please hand-in during the first break period of the class. For each group, the set with the lower grade will be weighted 3%; the higher set will be weighted 6%. Problem set questions will be posted on cuLearn.

**Economic Forecast**

Prepare an economic forecast for Canada covering January – December, 2017.

- What do you expect to happen to interest rates and inflation?
- What are the prospects for growth in Canada's major economic sectors?
  - Manufacturing, real estate, banking, energy, retail, and telecom.
- What exchange rate movements are expected?

Include a discussion of the relationship of inflation with: interest rates; growth in our major sectors; and exchange rates.

What do you expect in the equity and debt markets over the year?

Think about: consumers, producers, government, trade, political factors, ...

Analyse the behaviour of leading indicators (see textbook page 544).

What important trends seem to be developing?

Maximum 2,200 words (8 – 10 pages, double-spaced), plus any tables. Include a list of data sources and references. (e.g. Monthly risk-free interest rates from January, 1994 – December, 2014 is the one month, constant maturity treasury bill rate provided by Fred II.).

Present a forecast that could help an investor. Support the forecast with a reasoned argument, backed-up by supporting data. There are no right or wrong answers. Your line of reasoning and a justification for your position are very important. A marking guide will be posted on cuLearn.

Doing well on the forecasting assignment involves research – in the textbook, in the library, on the internet. Each group is expected to figure things out for themselves, to learn terms, to find appropriate formulas, just as if they were given an assignment in a job or as if they were preparing to make investments of their own.

Some resources for Forecast Assignment

- Textbook Chapter 15
- Major bank economics online. For example:
  - [www.td.com/economics/analysis](http://www.td.com/economics/analysis)
  - [www.rbc.com/economics](http://www.rbc.com/economics)
- Government of Canada Canadian Economic Outlook
- Provincial government economic forecasts

### **Term Test**

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The class schedule shows the date of the midterm. In fairness to all, neither alternate test times nor a make-up term test will be administered. Students who miss the term test can have the weight of the test added to the weight of the final exam by presenting a doctor's note or other suitable documentation.

For students who earn a higher mark on the midterm than on the final exam, the weight of the term test will be 30% and of the exam will be 45%. For students who earn a higher mark on the final exam than on the midterm, the weight of the term test will be 10% and of the exam will be 65%. Studying hard to do well on the final exam might significantly raise your course mark.

## **Final Exam**

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The final examination will test your understanding of the concepts covered in the lectures and textbook. The final exam is for evaluation purposes, not instruction. It will not be returned to students.

The date and location of the final exam will be announced through the University's normal procedures. Be sure that you are available for the final exam. **Allowance will not be made for conflicting travel plans.**

**NOTE:** The final exam will be **comprehensive**, covering material from the **entire** course. Students who earn less than 40% on the final exam will receive an "F", regardless of their total mark in the course.

**NOTE:** Students who do not demonstrate a minimum level of in-term performance cannot defer the final exam. The requirement for satisfactory in-term performance is an overall average mark of 50% or better on. Students with unsatisfactory in-term performance who miss the final exam will be awarded FND for the course.

## **Trading Project – StockTrak: – Group of Two (2)**

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You have inherited \$1,000,000. Your objective is to create and manage a portfolio that:

- Has an asset allocation appropriate for your age (Read page 179);
- Invests according to the required tasks in the order below; and
- Performs well in terms of dollar value and of value-versus-risk as of the end of the assignment.

You may:    Trade on North American exchanges only;  
                 Trade on margin and short sell;  
                 Trade in options and futures towards the middle of the semester,  
                 if you are properly hedged (Read chapters 17, 18, 19).

Your grade will be based on two measures of performance (see grid below): total portfolio value, and Sharpe ratio, both as of the end of the assignment.

To better understand valuation, read chapters 8.2 & 15, and *Security Analysis*. Read about the Sharpe ratio in the textbook and / or online. Total return is more likely to reflect luck than is the Sharpe ratio.

Undertake this project with one other classmate – **TWO** students per account. Make sure to fully list both student's names in the registration, or the missing name will not receive marks at the end of the semester. To register, please go to the StockTrak home page, click on "Register" then "Students" and type "Carleton-BUSI3502-F16" as the class name OR go to:

<http://www.stocktrak.com/public/members/registrationstudents.aspx?p=Carleton-BUSI3502-F16>  
and follow the instructions.

During registration StockTrak may ask for personal information. Some of it strikes me as unnecessary and best kept private (e.g. birthdate). Put down what you decide is appropriate.

There may be a discount code attached to new Bodie/Kane/Marcus textbooks, but you can leave the space blank if you have no code. The dates of the beginning and ending of the assignment are shown in the class schedule below. It is your responsibility to register and pay. Registration opens on September 7<sup>th</sup> and closes on October 1<sup>st</sup>. Without an account, your team will receive a zero on this assignment.

Links to StockTrak instructions for trading should be easy to find once you have your account registered. Please read the trading restrictions on the website carefully. The marking matrix is below. Note that, as in real market conditions, **your performance is relative to the other participants.**

		Portfolio Value	
		Top Half	Bottom Half
Sharpe Ratio	Top Half	8%	7%
	Bottom Half	7%	6%

The trading tasks below are related to investment topics that we will be covering. Think about why you are being asked to do each task. For example, in Task 1, why don't I say to invest \$400,000 in only one stock? Why do I say at least 3 different sectors? Why not all in one sector? If you cannot figure out why you are being asked to do something, pull out the textbook or do a search online and read about it.

**NOTE:**

At the end of the assignment, your trading history will be examined. If your portfolio did not satisfy the parameters specified for a task, you will be penalized 0.5 marks per offense. For example, if you do not trade in two futures contracts after completing Task 4, you will be docked 0.5 mark. Or for example, if you complete Task 1 and start Task 2 four days later, you will also be docked 0.5 marks. The maximum number of marks that you can be docked via trading penalties is limited to the grade that you would have received. If you satisfy all tasks, in order, however, the maximum you can receive on this project is shown in the grid of marks for the assignment.

## **Trading Tasks:**

**Tasks must be carried out in order. You do not need to start Task 1 on the day that trading opens.**

**At least 7 days must pass between completing a task and starting the next task.**

**After the 7<sup>th</sup> day of a given task, you may adjust your holdings. For example, for Task 1, you buy 8 stocks. On day 11, say, you may decide to sell two of the stocks and replace them with three different stocks.**

**You must complete Task 5 by the close of trading November 16.**

Task 1: Dip your toes into investing, in a sensible way.

Invest long (i.e. buy) at least 40% of your portfolio value in at least 8 different stocks (share price \$3.00 or higher) in at least 3 different sectors. Stocks do not have to be in the S&P500; but use the S&P sector / industry guides.

Minimal relevant readings: 1.3, 1.6, 2.3

Task 2: What is the point of shorting stocks? People with a long time until retirement can afford to increase risk in order to increase expected return.

Short at least 2 securities for amounts of at least \$10,000 each. Increase your long equity stake (excluding short exposure) to at least 70% of total portfolio value. Maintain exposure to at least 8 different securities over at least 3 different sectors. Remember, managing your equity exposure may involve changing some stocks and / or the weights of the stocks in your long holdings.

Non-equity holdings may now include bonds. What is your capital allocation?

Minimal relevant readings: 3.2, 3.4, 3.5, 2.1, 2.2

Task 3: Shorting using options. How is buying a put like shorting a stock?

Keep at least 70% long (You may manipulate your holdings, but maintain a 70% long exposure – 8 different securities, 3 sectors minimum.). You can continue to hold your short positions, or not, but you now must short using options. Option strategies you may try are a protective put and / or a covered call (a minimum of \$5,000 worth of the underlying stock for a given strategy).

A protective put involves purchasing a put option contract on a stock (or index) that you presently own. If the stock (or index) falls, the put rises

to offset it. If the stock rises, the put is worthless, but you've made money on the stock (or index). This mitigates downside risk.

A covered call involves selling (i.e. writing) a call contract on a stock (or index) that you own. The call will generate a premium since you sold it, and the premium helps to defer losses should the stock price fall. If the stock price rises, you deliver for a profit.

Protective puts and covered calls are far cheaper than shorting, and can give you added leverage to reduce exposure to downside risk far more efficiently.

Minimal relevant readings: 2.5, 17.2, 17.3

Task 4: Investing using options. What are the two kinds of options traders?

Keep previous tasks in effect. Maintain at least a 70% long equity stake. You now must enter into options trades, independent of your holdings. You may choose any strategies – buying, writing, spreads, combos, etc., trading no less than \$5,000 worth of the underlying asset and no more than \$20,000 in each strategy (absolute values if you choose to write). This means \$20,000 worth of the underlying, not \$20,000 worth of options. You are allowed to reduce your shorts, and / or use protective puts or covered calls, as long as you maintain at least \$2,500 (of the underlying) invested in some form of insurance (independent of the options strategies above). Are your options liquid?

Task 5: Investing using futures. Can you eat 40,000 lbs of pork bellies?

Keep all previous entries in balance, and maintain at least a 70% long equity stake. Enter into at least 2 futures contracts on any commodity. The notional value (value of the underlying commodity) not to exceed \$80,000 each.

Minimal relevant readings: 19.1, 19.2 and:

[https://onlineint.optionsxpress.com/educational\\_center/futures/futures\\_level\\_2\\_4.aspx?nav=2&left\\_nav=1&item=futures2\\_4](https://onlineint.optionsxpress.com/educational_center/futures/futures_level_2_4.aspx?nav=2&left_nav=1&item=futures2_4)

Task 6: No (trading) rules until the end of the assignment.

For this last task, do whatever you see fit – a free-for-all. There are no required holdings. This as your opportunity to modify your portfolio to try and improve your standing (if you are not doing well), or perhaps to liquidate, to lock in a good ranking. There is no final written submitted portfolio.

In practice, a fund manager might modify her holdings just before the quarterly report so that it reflects what she wants investors in her fund to see, not necessarily what she has done (called window dressing).

### **Course Sharing Websites**

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Student or professor materials created for this course (including presentations and posted notes, labs, case studies, assignments and exams) remain the intellectual property of the author(s). They are intended for personal use and may not be reproduced or redistributed without prior written consent of the author(s).

### **How to do better in the course. What you should expect of yourself.**

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1. Attend lectures. Missing lectures could adversely affect your understanding of subsequent materials. Further, having regular times to be fully focused on the course will help your learning.
2. Read the relevant chapters of the text book before attending lectures. I won't be spending lots of time spoon feeding you terms and basic ideas.
3. Engage during lectures. Participate in class. Ask and answer questions.
4. Attempt the assigned practice questions. Work through the Concept Check problems sprinkled through each chapter. Check out the Online Learning Centre offered by the textbook publisher for chapter summaries, practice quizzes, etc.
5. Study in a group. Even if you are uncertain, explaining a concept or the solution to a problem to somebody else helps you to understand.
6. Enjoy the trading assignment, but keep in mind that it offers you a chance to apply course concepts in a "real" situation. Sensible and well-researched trades likely will improve your Sharpe ratio.
7. Read the business section of at least one major newspaper to keep up with the latest developments in the finance community.
8. Learn the course material as we go along, not just before the test and exam. Make a commitment to spend a minimum of 15 minutes every day on the course. Certainly, you'll spend much more time some days, but turning your mind to the course every day will pay off.

Best wishes, Dr. David Jackson

## Course Schedule for BUSI 3502 Fall 2016

Week	Lecture	Text Chapter
Sept. 07	Introduction to Financial Markets. Professional Ethics.	1
14	Financial Instruments. Trading on Securities Markets.	2 3
21	Return & Risk. Capital Allocation to Risky Assets. <b>Start:</b> Stock Trak Assignment.	4 5
28	Optimal Risky Portfolios <b>Due:</b> Problem Set 1	6
Oct. 05	The Capital Asset Pricing Model	7.1 – 7.4
Oct. 12	Index Models	8
19	<b>Midterm Test</b> (Covers chapters 1 – 7)	
26	<b>Fall Break – NO LECTURE</b>	
Nov. 02	Bond Prices and Yields Term Structure	12 13
09	Duration <b>Due:</b> Problem Set 2	14.1
16	Macroeconomic and Industry Analysis Security Analysis Financial Statement Analysis	15 16 17
23	Options <b>Due:</b> Forecasting Assignment <b>End:</b> Stock Trak Assignment	18 19
30	Futures and Forwards Markets	20

While every attempt will be made to keep to the schedule above, circumstances may necessitate modifications during the semester.

## **IMPORTANT ADDITIONAL INFORMATION**

### **RECOMMENDED CALCULATOR IN BUSI COURSE EXAMINATIONS**

If you are purchasing a calculator, we recommend any one of the following options: Texas Instruments BA II Plus (including Pro Model), Hewlett Packard HP 12C (including Platinum model), Staples Financial Calculator, Sharp EL-738C & Hewlett Packard HP 10bII. Only non-programmable calculators without text storage capabilities will be allowed in the test and exam for this course.

Printed translation dictionaries are allowed, as long as they do not contain handwritten notes. Electronic translation dictionaries are not allowed.

### **GROUP WORK**

The Sprott School of Business encourages group assignments in the school for several reasons. They provide you with opportunities to develop and enhance interpersonal, communication, leadership, follower-ship and other group skills. Group assignments are also good for learning integrative skills for putting together a complex task. Your professor may assign one or more group tasks / assignments / projects in this course. Before embarking on a specific problem as a group, it is your responsibility to ensure that the problem is meant to be a group assignment and not an individual one.

### **ACADEMIC REGULATIONS**

University rules regarding registration, withdrawal, appealing marks, and most anything else you might need to know can be found on the university's website, here:

<http://calendar.carleton.ca/undergrad/regulations/academicregulationsoftheuniversity/>

### **ACADEMIC ACCOMMODATION**

You may need special arrangements to meet your academic obligations during the term because of disability, pregnancy or religious obligations. Please review the course outline promptly and write to me with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist.

### **DISABILITIES**

The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or

[pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your ***Letter of Accommodation*** at the beginning of the term, and no later than two weeks before the first in-class scheduled test or exam requiring accommodation (*if applicable*). After requesting accommodation from PMC, meet with me to ensure accommodation arrangements are appropriate and can be made. The deadlines for contacting the Paul Menton Centre regarding accommodations for December exams is November 11, 2016.

### **RELIGIOUS OBSERVANCE**

Students requesting academic accommodation on the basis of religious observance should make a formal, written request to their instructors for alternate dates and/or means of satisfying academic requirements. Such requests should be made during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist, but no later than two weeks before the compulsory academic event. Accommodation is to be worked out directly and on an individual basis between the student and the instructor(s) involved. Instructors will make accommodations in a way that avoids academic disadvantage to the student.

Students or instructors who have questions or want to confirm accommodation eligibility of a religious event or practice may refer to the Equity Services website for a list of holy days and Carleton's Academic Accommodation policies, or may contact an Equity Services Advisor in the Equity Services Department for assistance.

### **PREGNANCY**

Pregnant students requiring academic accommodations are encouraged to contact an Equity Advisor in Equity Services to complete *a letter of accommodation*. The student must then make an appointment to discuss her needs with the instructor at least two weeks prior to the first academic event in which it is anticipated the accommodation will be required.

### **ACADEMIC INTEGRITY – YOUR RESPONSIBILITY!**

Violations of academic integrity are a serious academic offence. Violations of academic integrity – presenting another's ideas, arguments, words or images as your own, using unauthorized material, misrepresentation, fabricating or misrepresenting research data, unauthorized co-operation or collaboration or completing work for another student – weaken the quality of the degree and will not be tolerated. Penalties may include; a grade of Failure in the submitted work and/or course; academic probation; a refusal of permission to continue or to register in a specific degree program; suspension from full-time studies; suspension from all studies at Carleton; expulsion from Carleton, amongst others. Students are expected to familiarize themselves with and

follow the Carleton University Student Academic Integrity Policy which is available, along with resources for compliance at:

<http://www2.carleton.ca/sasc/advisingcentre/academic-integrity/>.

### **ASSISTANCE FOR STUDENTS**

Student Academic Success Centre (SASC): [www.carleton.ca/sasc](http://www.carleton.ca/sasc)

Writing Tutorial Services: <http://www1.carleton.ca/sasc/writing-tutorial-service/>

The Spratt student services office, located in 710 Dunton Tower, offers academic advising, study skills advising, and overall academic success support. If you're having a difficult time with this course or others, or just need some guidance on how to successfully complete your Spratt degree, please drop in any weekday between 8:30am and 4:30pm. Our advisors are happy to discuss grades, course selection, tutoring, concentrations, and will ensure that you get connected with the resources you need to succeed! <http://spratt.carleton.ca/students/undergraduate/support-services/>

Be in the know with what's happening at Spratt: Follow @SprattStudents and find us on Facebook SprattStudents Spratt.

### **IMPORTANT INFORMATION:**

- Students must always retain a hard copy of all work that is submitted.
  - All final grades are subject to the Dean's approval.
  - For us to respond to your emails, we need to see your full name, CU ID, and the email must be written from your valid CARLETON address. Therefore, it would be easier to respond to your inquiries if you would send all email from your Carleton account. If you do not have or have yet to activate this account, you may wish to do so by visiting <http://carleton.ca/ccs/students/>
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