



**BUSI 3502 C
WINTER 2014
INVESTMENTS**

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Course meets: Wednesday 8:35AM-11:25AM (UC282)

Pre-requisites & precluded Courses: BUSI 2504 and BUSI 2505 with a grade of C+ or higher in each and STAT 2606 and ECON 2009 with a grade of C- or higher.

This course is a prerequisite to

1. BUSI 4500 (with a grade of C- or higher)
2. BUSI 4502 (with a grade of C- or higher)
3. BUSI 4504 (with a grade of C- or higher)
4. BUSI 4510 (with a grade of C- or higher)
5. BUSI 4511 (with a grade of C- or higher)

Course Description and Objectives:

The objective of this course is to provide students with the tools necessary to become successful investors or portfolio/money managers. A rigorous quantitative and qualitative analysis of the money and capital markets is offered, with the primary focus on the North American markets. There is a detailed examination of how and where securities are traded and how they are valued, providing insight in to how investors appropriately allocate funds across different investment vehicles. This course focuses primarily on an examination of the equity markets in North America. A detailed examination of the trading process and the function of securities markets are presented. This is followed by exposure to the concepts of risk and return, specifically analyzing the role played in security valuation and in portfolio diversification

Required Text:

Bodie et al., **Investments**, 7th Canadian Edition, McGraw-Hill, Ryerson, 2011.

Suggested Texts/Readings:

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

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

Graham, B., **Security Analysis**

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

Note: There is a required enrolment in Stocktrak for \$28.95USD per team (no more than two students per team). Registration info below.

Grading Scheme:

In-class quizzes (best 3 of 4) 3@5%	15%
Trading Project (see below)	10%
Mid-Term Exam	25-30%
Final Exam	45-50%
Total	100%

Expectations:

The course will require you to both understand the economic intuition of financial concepts and to perform mathematical calculation.

(1) **Reading** – You are expected to have covered the readings before class. After class, you should re-read the chapter to gain a complete understanding of the material.

(2) **Sample Problems** – Finance cannot be learned without solving problems. To ensure that you understand the material, sample problems will be given. These problems will NOT be graded. However, it is strongly recommended that you try solving the assigned problems as they will help you in preparation for quizzes and exams. Group work on the sample problems is encouraged.

Notes on Examinations and Quizzes

The mid-term test and the final exam will cover both the theory and application of topics covered in classes and the readings. The mid-term test and final examination are closed-book and closed-notes. Students are allowed to bring in a TI BAI plus calculator only. The final exam will be comprehensive. Both midterm and final will consist of multiple choice and short essay/problem type questions. The date for the final exam will be posted by the University later in the semester. Quizzes are designed to focus on material that was just covered. They will be approximately 20-30 minutes in length.

Exam and Quiz Attendance

If a student is unable to sit for a quiz or mid-term test due to verifiable illness (or, in rare cases, some other circumstances beyond your control), the mark allocation to that quiz will be allocated to remaining quizzes; the mark allocation for the mid-term test will be allocated to the final exam. If a student is unable to sit for the final exam, the student may apply to the Registrar's Office to write a deferred examination. Deferral final examination will only be granted to students showing satisfactory in-term performance (as described below). Please also see Sections 2.4, 2.5 and 2.6 of the Undergraduate Calendar. It should be noted that deferred examinations are not granted to students who make travel plans that conflict with the examination period.

Satisfactory In-term Performance

1. The criterion and the standard for Satisfactory In-term Performance are as follow:
50% of total pre-final exam work (cumulative) marks. This includes total marks for all quizzes and midterm exam.

2. Unsatisfactory In-term Performance in this course will lead to

Failure in this course (regardless of the performance at the Final exam or final project)

No

FND grade in this course (in case of missed Final exam)

Yes

COURSE SCHEDULE (TENTATIVE AND SUBJECT TO CHANGES)

Date	Topic	Chapter in Bodie et al.
Jan.8	Introduction, Financial Markets and Instruments	1, 2
Jan.15	Trading on Securities Markets	3
Jan.22	Return and Risk: Analyzing the Historical Record, Risk Aversion and Capital Allocation to Risky Assets, Quiz 1	4, 5
Jan.29	Optimal Risky Portfolios	6
Feb.5	The Capital Asset Pricing Model, Quiz 2	7
Feb.12	MIDTERM EXAM (in class)	
Feb.19	<u>Reading Break. No classes.</u>	
Feb.26	Index Models and the Arbitrage Pricing Theory	8
Mar.5	Market Efficiency, Bond Prices and Yields, Quiz 3	9, 12
Mar.12	The Term Structure of Interest Rates	13
Mar.19	Managing Bond Portfolios, Quiz 4	14
Mar.26	Active Management and Performance Measurement	20
Apr.2	Portfolio Management Techniques	21

Trading Project -- StockTrak

Suppose you inherited \$1,000,000. In order to keep the money, you must create a portfolio that is appropriate for your age in terms of asset allocation (local and international equities, cash, etc.), is invested according to the required schedule below (temporary cash is ok if opportunities are being explored), and is worth more than \$1,000,000 by the end of the semester. You can trade on the North American exchanges only, you can trade on margin and you can short sell, you can venture into options and futures trading toward the end of the semester if you are properly hedged (although we will not be covering options or futures – read chapters 17, 18, 19 if interested). As well, please read chapters 9, 15 & 16, and *Security Analysis* to get a better understanding of valuations. Your grade will be based on your total portfolio return and Sharpe ratio calculated at the end of the semester (see grid below). To fully understand the Sharpe Ratio, please read chapter 20.

You can attempt this project alone, or you can team up with one other classmate – no more than **TWO** students per account. To register, please go to

<http://www.stocktrak.com/public/members/registrationstudents.aspx?p=BUSI3502W14>

and follow the instructions. You will need to ensure both student names are listed fully in the registration, or the missing name will not receive marks at the end of the semester. Make sure that my name is listed there. I am not sure if there is a discount code attached to the new Bodie/Kane book, but you can leave the space blank. The rules and instructions for trading are located on the right hand margin of that page, and on the pull down menus above. Trading begins on January 10th and ends on April 4th. Carleton will be billed for your registration, and it is your responsibility to pay Carleton – we will collect in class on January 15th (cash, cheque or MC/Visa), or any time earlier in Sprott General Office in DT801. Failure to pay by January 17th will result in the deletion of your account and a zero on the assignment. 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.**

	Top Value Third	2 nd Value Third	3 rd Value Third
Top Sharpe Ratio Third	10	9	8
2 nd Sharpe Third	9	8	7
3 rd Sharpe Third	8	7	6

Trading Schedule:

By January 17: Invest (long only) at least 40% of your portfolio (\$400,000) in at least 8 different securities (\$3.00 or higher) in at least 3 different sectors as defined by the S&P500. The stocks chosen do not have to be within the S&P500, just use the sector/industry guides. You can certainly invest more than this, and across different countries, but all transactions must be long equity purchases only.

By January 31: While continuing to manage your long investments, increase equity stake to at least 70% of your total available cash. Continue to maintain exposure to at least 8 different securities over at least 3 different sectors. Short at least 2 securities for amounts of at least \$10,000 each.

By February 28: keeping at least 70% long (you can manipulate your holdings, but maintain an 70% long exposure - 8 diff securities, 3 sectors min.), you can continue to hold your two (at least) short positions and/or you can now start to cover with options. You do not need to maintain your shorts if you choose. The options strategy(s) you can attempt are as follows;
A minimum of \$5k placed into a protective put and/or a covered call.

A protective put is purchasing a put option contract on a stock (or index) that you presently own. It will protect against downside. If the stock (or index) rises, the put is worthless, but you've made money on the stock (or index). This will mitigate much risk.

A covered call is selling (writing) a call on a stock (or index) that you own. It will generate a premium since you sold it, and it can help 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 much added leverage to reduce exposure far more efficiently. Note that if you choose to keep your shorts, you do not need to invest in options – but you must be invested in either or both.

By March 14: Keeping the previous 3 assignments in tune, maintaining at least a 70% long equity stake, you must now enter into options trades independent of your holdings. Choose any strategies you like, buying, writing, spreads, combos, etc., trading no less than \$5,000 and no more than \$20,000 worth of the underlying asset in each strategy (absolute values if you choose to write). This does not mean \$20,000 worth of options, rather \$20,000 worth of the underlying. If you wish to trim down your shorts, protective puts or covered calls, you can as well, as long as you maintain at least \$2,500 invested in some form of insurance (independent of the options strategies above).

By March 28: Again, keeping all previous entries in check, maintaining at least a 60% long equity stake, enter into at least 2 futures contract transactions on any commodity only, with a notional value not to exceed \$50,000 each (i.e., not the margin amount, the underlying amount).

By April 4th: Window-dressing time now. Your trading assignment for this last installment is to package your portfolio however you see fit -- a free-for-all. In the real world, you would typically modify your holdings for your quarterly report so that it reflects what you want people to see, not necessarily what you have done. Since there is no final written submitted portfolio, use this as an opportunity to modify or liquidate so that you can solidify your ranking...

NOTE: If, at any time, your portfolio does not satisfy these parameters, you will be penalized 0.5 marks per offense per trading period. In other words, if you do not trade in 2 futures contracts by March 28th, you will be docked 0.5 mark. Or, for example, if you do not have 70% of your portfolio invested long in equity in any given trading period, you will also be docked 0.5 marks, etc. The maximum amount of marks that you can be docked via trading penalties is limited to the grade that you would have received. However, if you satisfy all requirements, the minimum you can receive on this project is a 6 out of 10.

CuLearn:

All course information, grades, announcements will be placed on CuLearn. It is your responsibility to ensure that you have access. In order to log on to the course page, you need to firstly be formally registered in 3502. Please check it regularly.

Students' Responsibilities

Students are responsible for all readings listed on the course schedule regardless of whether or not specific mention of certain topics is made in class and regardless of whether or not topics are addressed in class. Because of time constraints, it will be impossible to cover all the chapter material in class. Class time will be spent on the most important topics and on the topics where students receive the most benefit from explanation in class.

Required 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

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.

Medical certificate

Please note that in all occasions that call for a medical certificate you must use or furnish the information demanded in the standard university form.

<http://www1.carleton.ca/registrar/forms/>

In accordance with the Carleton University Undergraduate Calendar (p 34), the letter grades assigned in this course will have the following percentage equivalents:

A+ = 90-100	B+ = 77-79	C+ = 67-69	D+ = 57-59
A = 85-89	B = 73-76	C = 63-66	D = 53-56
A - = 80-84	B - = 70-72	C - = 60-62	D - = 50-52

F = Below 50 WDN = Withdrawn from the course

ABS = Student absent from final exam

DEF = Deferred (See above)

FND = (Failed, no Deferred) = Student could not pass the course even with 100% on final exam

Academic Regulations, Accommodations, Etc.

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/>

Requests for Academic Accommodations

Academic Accommodations for Students with 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 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 made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (*if applicable*).

- The deadlines for contacting the Paul Menton Centre regarding accommodation for final exams for the December 2013 exam period is November 8, 2013 and for the April 2014 exam period is March 7, 2014.

For Religious Obligations:

Students requesting academic accommodation on the basis of religious obligation 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 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.

For 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

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 expulsion; suspension

from all studies at Carleton; suspension from full-time studies; a refusal of permission to continue or to register in a specific degree program; academic probation; and a grade of Failure in the course, 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

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

Peer Assisted Study Sessions (PASS): www.carleton.ca/sasc/peer-assisted-study-sessions

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.
 - Please note that you will be able to link your CONNECT (MyCarleton) account to other non-CONNECT accounts and receive emails from us. However, 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 CONNECT address. Therefore, it would be easier to respond to your inquiries if you would send all email from your connect account. If you do not have or have yet to activate this account, you may wish to do so by visiting <https://portal.carleton.ca/>
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