

**Business F713  
Security Analysis  
Winter 2019 Course Outline**

**Finance and Business Economics Area  
DeGroot School of Business  
McMaster University**

---

***COURSE OBJECTIVE***

---

The objective of this course is to introduce the student to both the theory and practice of investment analysis. The student should obtain a broad knowledge of financial markets, portfolio management principles and the risk-returns characteristics of the main investment instruments through this course.

---

***INSTRUCTOR AND CONTACT INFORMATION***

---

**Section 1: Thu 11:30 – 2:20**

**Anthony Mayadunne**

Instructor

[tony.mayadunne@gmail.com](mailto:tony.mayadunne@gmail.com)

Office: TSH615

Office Hours: Mon 5:30-6:30 (after class by appointment only)

**Student TA**

TBA

TBA

Office: TBA

Office Hours:

TBA

---

***COURSE ELEMENTS***

---

Credit Value: 3	Leadership: Yes	IT skills: Yes	Global view: Yes
Avenue: No	Ethics: Yes	Numeracy: Yes	Written skills: Yes
Participation: Yes	Innovation: Yes	Group work: Yes	Oral skills: Yes
Evidence-based: Yes	Experiential: No	Final Exam: Yes	Guest speaker(s): No

---

## ***COURSE DESCRIPTION***

---

The course begins with an overview of the investment environment, financial markets and trading of securities, followed by a more in-depth analysis of key investment topics. These topics include: asset allocation and portfolio management, performance measurement, the capital asset pricing model, arbitrage pricing theory, term structure of interest rates, market efficiency, valuation of equities, bonds and derivatives. Moreover, this course is a useful introduction to the Chartered Financial Analyst (CFA) curriculum ([www.cfainstitute.org](http://www.cfainstitute.org)).

---

## ***LEARNING OUTCOMES***

---

Upon completion of this course, students should:

- Have a good understanding of the financial markets and various financial assets;
- Have a good understanding of portfolio theory and portfolio management;
- Have a good understanding of some important asset pricing models, including their practical implications and limitations;
- Be able to calculate key financial ratios that facilitate the investment decisions

---

## ***COURSE MATERIALS AND READINGS***

---

- I will provide detailed lecture notes in class, and as such I do not have a specific required textbook for the course. I have two recommended textbooks below that the students can use for their reference.

The philosophy of this course is learning-by-doing and therefore we will develop Excel applications for each of the models introduced in class, integrating financial theory and practice and guiding decision making by linking real-time data, either from actual or simulated market. The course will also make some use of probability, statistics, linear algebra and visual basic for applications. (Note that students are not required to have prior knowledge of VBA.)

### **Optional Textbooks (for reference only):**

Investments: Eighth Canadian Edition, by Z. Bodie, A. Kane, A.J. Marcus, S. Perrakis, P.J. Ryan, L.N. Switzer; McGraw-Hill Ryerson, 2014.

Fundamentals of Investing: 13<sup>th</sup> Edition, by Scott Smart, Lawrence Gitman, Michael Joehnk; Pearson, 2016

---

## ***EVALUATION***

---

### ***Exams***

There will be a mid-term and a final exam (exams are cumulative). Exams will test students on their understanding of concepts and problem solving ability. The exams are closed-book, but a formula sheet will be posted on Mosaic which students can print out and modify if they wish for each exam (formula sheets will **not** include definitions or instructions). Students may also use non-programmable scientific and financial calculators when taking exams.

Make-up exams *will not be* given. If you do miss the mid-term and you provide a doctor's note or other official university excused absence verification, your grades for the mid-term will be re-weighted to the finals. Exams are scheduled well in advance so that students can plan accordingly. An unexcused absence from an exam will result in a grade of zero on the exam.

### ***Homework***

There will be three individual homework assignments (of which the best two scores will be considered) and one group case study, the details of which will be discussed in class. These deliverables will have a clear due date and time and late submissions will not be accepted for any reason. Solutions for the homework will be discussed in class following their due date. You may work together on the individual homework, but each student must write up their own solutions.

### ***Participation***

Name cards and class pictures are used to help give credit for your participation. You must have a name card with your **full first and last name** clearly written and displayed in front of you for every class.

Since student participation is an important component of this course, I will be taking attendance especially in class which have a low turnout, and will be mindful of the quality of student participation, engagement and classroom etiquette

This grade component reflects significant and original contributions to the class discussion in the form of intelligent and constructive questions as well as thoughtful and topical answers. It does not reflect merely the quantity of verbal utterances. I expect you to come to each class, be on time and be prepared to participate. Please bring your name cards to each class - I need to know who you are in order to track participation marks and my name/face memory is poor. Also: I reserve the right to have unannounced mini pop-quizzes should I find that your class participation is insufficient. The grades on these would count towards your class participation. I am hoping that the excellence of your class participation will allow me to skip these exercises as it has been the case in the past.

Your final grade will be calculated as follows:

Grading <b>Assignment</b>	<b>Percent</b>
Class participation	10
3 Individual Homework (best of 2.5% each)	5
1 Group Case Study	10
Mid-Term	30
Final (during Finals Week)	45
Total Grade	100

NOTE: The use of a McMaster standard calculator is allowed during examinations in this course. See McMaster calculator policy at the following URL:

[www.mcmaster.ca/policy/Students-AcademicStudies/UndergraduateExaminationsPolicy.pdf](http://www.mcmaster.ca/policy/Students-AcademicStudies/UndergraduateExaminationsPolicy.pdf)

### **Grade Conversion**

At the end of the course your overall percentage grade will be converted to your letter grade in accordance with the following conversion scheme:

<b>LETTER GRADE</b>	<b>PERCENT</b>	<b>LETTER GRADE</b>	<b>PERCENT</b>
A+	90-100	C+	67-69
A	85-89	C	63-66
A-	80-84	C-	60-62
B+	77-79	D+	57-59
B	73-76	D	53-56
B-	70-72	D-	50-52
F		00-49	

### **Communication and Feedback**

Students who wish to correspond with instructors or TAs directly via email must send messages that originate from their official McMaster University email account. This protects the confidentiality and sensitivity of information as well as confirms the identity of the student. Emails regarding course issues should NOT be sent to the Area Administrative Assistants. Instructors are required to provide evaluation feedback for at least 10% of the final grade to students prior to Week #9 in the term. Instructors

may solicit feedback via an informal course review with students by Week #4 to allow time for modifications in curriculum delivery.

Instructors are required to provide evaluation feedback for at least 10% of the final grade to students prior to Week #8 in the term. Instructors may conduct an informal course review with students by Week #4 to allow time for modifications in curriculum delivery.

Students who wish to have a course component re-evaluated must complete the following form:

[http://www.mcmaster.ca/policy/Students-AcademicStudies/Form\\_A.pdf](http://www.mcmaster.ca/policy/Students-AcademicStudies/Form_A.pdf)

In order for the component to be re-read:

- The component must be worth 10% or more of the final grade in the course;
- Students pay a fee of \$50 in Gilmour Hall 209 and the receipt is then brought to Student Experience - Academic Office (formerly the APO) in DSB 112;
- The Area Chair will seek out an independent adjudicator to re-grade the component;
- An adjustment to the grade for the component will be made if a grade change of three points or greater on the 12-point scale (equivalent to 10 marks out of 100) has been suggested by the adjudicator as assigned by the Area Chair;
- If a grade change is made, the student fee will be refunded.

---

### ***ACADEMIC INTEGRITY***

---

You are expected to exhibit honesty and use ethical behavior in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the *Academic Integrity Policy*, located at:

[www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity)

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations

---

### ***AUTHENTICITY/PLAGIARISM DETECTION***

---

In this course we will be using a web-based service (Turnitin.com) to reveal authenticity and ownership of student submitted work. Students will be expected to submit their work electronically either directly to Turnitin.com or via Avenue to Learn (A2L) plagiarism detection (a service supported by Turnitin.com) so can be checked for academic dishonesty. Students who do not wish to submit their

work through A2L and/or Turnitin.com must still submit an electronic and/or hardcopy to the instructor. No penalty will be assigned to a student who does not submit work to Turnitin.com or A2L. All submitted work is subject to normal verification that standards of academic integrity have been upheld (e.g., on-line search, other software, etc.). To see the Turnitin.com Policy, please go to;

[www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity).

---

### ***REQUESTING RELIEF FOR MISSED ACADEMIC WORK***

---

Students may request relief from a regularly scheduled midterm, test, assignment or other course components. Please refer to the policy and procedure on the DeGroot website at the link below;

<http://ug.degroote.mcmaster.ca/forms-and-resources/misled-course-work-policy/>

---

### ***STUDENT ACCESSIBILITY SERVICES***

---

Students who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Academic accommodations must be arranged for each term of study. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail [sas@mcmaster.ca](mailto:sas@mcmaster.ca).

For further information, consult McMaster University's Policy for Academic Accommodation of Students with Disabilities:

<http://www.mcmaster.ca/policy/Students-AcademicStudies/AcademicAccommodation-StudentsWithDisabilities.pdf>

---

### ***ACADEMIC ACCOMMODATION FOR RELIGIOUS, INDIGENOUS OR SPIRITUAL OBSERVANCES (RISO)***

---

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the RISO policy. Students requiring a RISO accommodation should submit their request, including the dates/times needing to be accommodated and the courses which will be impacted, to their Faculty Office normally within 10 days of the beginning of term or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

---

### ***POTENTIAL MODIFICATION TO THE COURSE***

---

The instructor reserves the right to modify elements of the course during the term. There may be changes to the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

---

**ACKNOWLEDGEMENT OF COURSE POLICIES**


---

Your enrolment in Commerce F713 will be considered to be an implicit acknowledgement of the course policies outlined above, or of any other that may be announced during lecture and/or on A2L. **It is your responsibility to read this course outline, to familiarize yourself with the course policies and to act accordingly.**

Lack of awareness of the course policies **cannot be invoked** at any point during this course for failure to meet them. It is your responsibility to ask for clarification on any policies that you do not understand.

---

**COURSE SCHEDULE**


---

**Business F713  
Security Analysis  
Winter 2019 Course Schedule**

<b>WEEK</b>	<b>DATE</b>	<b>TOPIC</b>	<b>ASSIGNMENTS</b>
1	Mon. Jan 10	Introduction and foundations review Valuing Bonds	Lecture notes Recommended reading: Bodie Ch 12
2	Mon. Jan 17	Equity Valuation Dividend Discount Model	Lecture Notes Recommended reading: Bodie Ch 16
3	Mon. Jan 24	Risk and Return Standard deviation and moments of distribution	Lecture Notes Hands-on Excel Example 1 & 2 Recommended Reading: Bodie Ch 4
4	Mon. Jan 31	Estimating Betas Capital Asset Pricing Model I	Lecture Notes Hands-on Excel Example 3 & 4 Recommended reading: Bodie Ch 7
5	Mon. Feb 7	Capital Asset pricing Model II Multi-factor Models	Lecture Notes Hands-on Excel Example 5 Recommended reading: Bodie Ch 8
6	Mon. Feb 14	Midterm Exam (in class)	

WEEK	DATE	TOPIC	ASSIGNMENTS
	Mon. Feb 21	Midterm Recess. NO CLASS	
6	Mon. Feb 28	Foundations of Modern Portfolio Theory	Lecture Notes Hands-on Excel Example 6
7	Mon. Mar 7	Portfolios of two/three risky assets Linear Combination of N assets/portfolios	Lecture Notes Hands-on Excel Example 7 & 8
8	Mon. Mar 14	Calculating Efficient Portfolios	Lecture Notes Hands-on Excel Example 9 & 10
9	Mon. Mar 21	Introduction to Options The Binomial Option Pricing Model I	Lecture Notes Hands-on Excel Example 11 Recommended reading: Bodie Ch 18
10	Mon. Mar 28	Binomial Pricing Model II The Black-Scholes-Merton Model Real Options	Lecture Notes Hands-on Excel Example 12 & 13 Recommended reading: Bodie Ch 19
11	Mon. Apr 4	Market Efficiency Event Studies	Lecture Notes Hands-on Excel Example 14 Recommended reading: Bodie Ch 9
12	Mon. Apr 11	Final Exam review and consolidation of learning objectives	
	Apr 13 – Apr 27	Final Exam. Details TBA	