

FIN 7152 (A01) (3.0 CH)
INVESTMENT POLICY
WINTER 2022

INSTRUCTOR

Name:	Alex Paseka	Office Location:	Virtual Office until Feb 26 (UM Zoom), Drake 474 from Feb 28
Phone:	204-474-8353	Office Hours:	by appointment (Zoom)
Email:	alex.paseka@umanitoba.ca	Class Time:	Thursdays 6:15pm-9:30pm

COURSE DESCRIPTION

This course explores the theory and practice of investment management. Topics include: portfolio theory and management, market efficiency, options and futures. The objective of this course is to familiarize you with the investment process and portfolio management from both a theoretical and a practical perspective (acquired through a lab session and a group project). Starting from the assumption that the best learning is accomplished "by doing" and by applying the concepts discussed in class you will be expected to carry out a "hands-on" project during the term.

Pre-requisite: FIN 7020 (or FIN 6070 or FIN 6072).

COURSE OBJECTIVES

The purpose of this course is to introduce investment analysis. By the end of the course, students should have a good understanding of the objectives and techniques of the investment process and, more specifically, the following concepts:

- Capital and Money Market Instruments, How Securities are Traded (including Buying on Margin and Selling Short)
- Risk Aversion and Introduction to MPT (expected return and variance computation for an individual asset, correlation and covariance, expected return and variance of a portfolio, mean-variance dominance, utility function, indifference curves, global minimum variance portfolio, CAL, optimal risky portfolio)
- Bonds (Valuation, Term Structure of Interest Rates. Duration, Immunization, and Portfolio Management)
- Estimating the Markowitz Frontier and the Capital Market Line (CML)
- The Capital Asset Pricing Model (CAPM)
- Index models, APT
- Options (payoffs, profits, returns, strategies such as protective put, covered call, long straddle, and bull spread), Put-Call Parity
- Lower and Upper Bounds on Option Values
- Binomial Option Pricing (for European and American Options), Option Deltas
- Black-Scholes Option Valuation

AACSB Assurance of Learning Goals and Objectives – Masters of Finance

The Asper School of Business is proudly accredited by AACSB. Accreditation requires a process of continuous improvement for the School and our students. Part of “student improvement” is ensuring that students graduate with the knowledge and skills they need to succeed in their careers. To do so, the Asper School has set the **learning goals and objectives** listed below for the **MFIN Program**. The checked goal(s) and objective(s) will be addressed in this course and done so by means of the items listed next to the checkmark.

	Goals and Objectives in the MFIN Program	Goals and Objectives Addressed in this Course	Course Item(s) Relevant to these Goals and Objectives
1	Proficiency in Asset Valuation: Knowledge and understanding of the principles, theories, and applications of asset valuation.		
	A. Demonstrate knowledge and ability to apply asset valuation models.	✓	Entire course
	B. Demonstrate knowledge and ability to apply asset pricing models.	✓	Entire course
2	Proficiency in Portfolio Construction and Management: Knowledge and understanding of the principles, theories, and applications of portfolio construction and management.		
	A. Demonstrate knowledge of theories and applications of asset allocation.	✓	Entire course
	B. Demonstrate an understanding of the theories and approaches of risk management and its applications.	✓	Entire course
	C. Demonstrate an understanding of financial markets, instruments, asset classes, and trading environment.	✓	Entire course
	D. Demonstrate an ability to apply behavioural finance models in portfolio construction and management.		
3	Ethical Mindset: Consideration of ethical issues in financial analysis and management.		
	A. Demonstrate an understanding of the role of ethics in financial decision-making.		
	B. Demonstrate a knowledge of the CFA Institute’s <i>Code of Ethics</i> and the <i>Standards of Professional Conduct</i> .		
4	Communication Ability: Ability to communicate effectively and clearly, both verbally and in writing, in a professional context.		
	A. Communicate in a clear and concise manner.	✓	Term Project and two exams
	B. Communicate in a coherent and logical manner.	✓	Term Project and two exams

COURSE MATERIALS

1. **Textbook:** Bodie et al., *Investments: Ninth Canadian Edition*, McGraw-Hill Ryerson, Inc., Toronto, 2019.
2. **Class notes** - Students are required to bring a copy of my notes to class. It will be difficult to follow the lecture without these notes. The notes will be available on the course's UMLearn site.

LAB SESSION

This course will incorporate an in-class computer lab session. The outline lists the tentative dates for the session. The session is designed to implement financial models acquired in this course using Excel. See important information below regarding attendance during the lab session.

Students are required to attend the lab session. As such, students are required to have a laptop ready with Microsoft Excel at home (or Office 365 tools). It is important that you go to 'Data' tab and make sure that 'Data Analysis' and 'Solver' tools are installed. If not, go to File -> Options -> Add-ins and install these tools.

SUGGESTED END-OF-CHAPTER PROBLEMS

You will receive a list of suggested end-of-chapter problems from the required text soon after the first class. I strongly recommend that you master these problems. I will post solutions on UMLearn.

ATTENDANCE

Class attendance is required to derive maximum benefit from the course. Missing more than 20% of this course due to absences may result in a failing grade. It is your responsibility to inform your professor in advance of your absence and the reason for it. The professor decides how to deal with the impact of missed classes on your final grade.

It is important that you read the assigned material prior to the class and think about the issues covered. You are responsible for knowing what occurs in class, which may include material not covered in the readings, modifications to the syllabus, and announcements concerning exams.

Important: the term project uses the methods covered in the Lab. The only way you can do the term project and contribute to your group is if you actually attend this Lab. Therefore, attendance in all parts of the Lab is mandatory. Students failing to attend any part of the Lab will receive a grade equal to 75% of their group's term project grade.

COURSE ASSESSMENT

Grades will be assigned according to the following schedule:

Maximum Grade

Investment Challenge	5%
BMC	5%
Term Project	20%
Midterm Exam	30%
Final Exam	40%
Total	<u>100%</u>

Students must achieve at least a 60% grade on the term project in order to pass the course. A fixed percentage grading scale is not used in this course. **Final grades are based on the student's weighted mark and performance relative to other students.**

TERM PROJECT

A group project will be posted on UMLearn at least a week before the first lab session. The project must be completed in groups of minimum four and maximum five students.

Late projects will not be accepted. All projects must be typed (double-spaced, font size 12) with references to relevant tables, figures, or notes. Handwritten projects will not be accepted under any circumstances. More details to follow on UMLearn.

EXAMINATIONS

The **midterm exam** will take place on Saturday, March 19, 10:00 a.m. – 12:00 p.m. (location is TBD if we are back to in-person teaching; on UMLearn if we are still online). Please keep this date free. No makeup exam for the midterm will be given. A student who misses the midterm exam for a legitimate reason (e.g., illness) will have the weight of the midterm added to the final exam. If a student misses the final exam, they have to apply for a deferred exam as in any other term.

Both midterm and final exams will be closed book exams if we return to in-person learning. However, both midterm and final online exams will be open book exams. You may use a financial calculator. Note: the final exam is cumulative.

To protect the academic integrity of education at the Asper School, certain protocols will be observed for online exams. For instance, a small subset of questions will appear on a screen and you may not have the option to move back to questions you have already seen.

For online exams, we will be using university approved Respondus Lockdown Browser and Monitor, which will require you to have your camera and microphone on for the entire duration of the exam. As the software detects any unusual movements, please sit in a location where there are no people/pets or other moving objects in the camera's view during the exam.

BLOOMBERG MARKET CONCEPTS (BMC)

The Bloomberg Terminal will be used in this class. In order for you to get familiarized with it, I am expecting you to complete three sections of the self-paced course **Bloomberg Market Concepts (BMC)**. BMC will expose you to some of the most frequently used Bloomberg Terminal commands.

BMC consists of three sections - Core Concepts (includes four modules: Economic Indicators, Currencies, Fixed Income, and Equities), Terminal Basics, and Portfolio Management. You are required to complete the **Core Concepts** and **Terminal Basics**, and **Portfolio Management** sections for this class.

To sign up for BMC, please follow the steps outlined in the appropriate document available on UMLearn. To participate in BMC you will need our Class Code:

GROUP CODE: <see UMLearn version of the syllabus>

There are multiple quiz questions and case studies throughout the course to assess your understanding of the material. Please note that I will receive a report with details of your performance on all required components. The deadline for completion of the BMC course is midnight March 18.

INVESTMENT CHALLENGE

In this class we will be using StockTrak, a provider of educational stock market portfolio simulations and personal finance applications since 1990. It is an individual exercise. Students will have to pay a fee as per the website requirement. Each student will have one million dollars to begin the exercise. There is a 5% participation grade tied to your engagement on the platform.

What is the Investment Challenge? Open to anyone from any field of study, complete tasks while you learn how to manage a \$1M investment portfolio. The money is fake, but the investments are real. Join the challenge here (website link):

*registration page for your class on StockTrak
<see UMLearn version of the syllabus>

EMAIL

Students must use their University of Manitoba email account in all correspondence with me. Please include your full name in every email. It is a university policy that email communication between students and faculty be conducted solely with University of Manitoba email accounts.

COURSE SCHEDULE (tentative)

Topic	Date	Chapter	Reminder
Introduction			
1. Introduction	Jan 25	1	
2. Financial Markets and Instruments	Jan 25	2	
3. How Securities are Traded	Feb 1	3	
Fixed Income Securities			
4. Bonds – Valuation	Feb 1	14	
5. Bonds – Term Structure of Interest Rates	Feb 8	15	
6. Bonds – Duration and Portfolio Management	Feb 8	16	
Modern Portfolio Theory (MPT)			
7. Risk Aversion and Introduction to MPT	Feb 15, Mar 1	5.5, 5.6, 5.8, 6, 7.1-7.4	
		February 22 - 25	No classes (Winter Term Break)
LAB			
Estimating the Markowitz Frontier and the Capital Market Line (CML)	Mar 8		Must be present with a laptop, Excel, and required add-ins
Mid-Term Exam			
Time: 10:00 a.m. – 12:00 p.m.	Saturday, Mar 19		
Location: TBD			
Asset-Pricing Models			
8. The Capital Asset Pricing Model	Mar 15	9.1, 13.1	

9. Factor Models	Mar 15	8.1-8.3, 8.4 (pp 285-287, 280), 10.5
10. APT	Mar 22	10

Equity Derivatives

11. Options – Introduction	Mar 22	2.5, 20.1–20.2
12. Option Strategies and Payoffs	Mar 29	20.3–20.4
13. Option Pricing Models	Mar 29 – Apr 12	21.1–21.5

Project is due **Apr 12** **By midnight**

Final Exam	
Time: TBD	Date: TBD
Location: TBD	

ACADEMIC REGULATIONS AND STUDENT SERVICES

HUMAN ETHICS APPROVAL FOR DATA COLLECTION

As part of coursework, if you will be collecting data from people who are not students in this class, you must obtain Human Ethics approval from the UofM's Research Ethics Board (REB) prior to data collection. This applies to data collection such as surveys, interviews, focus groups, experiments, video recording, etc., where a respondent is solicited for participation.

If the entire class will be working on the same project, your instructor will apply for human ethics approval from the REB. If individuals or small groups of students will be working on different projects, it is the responsibility of the students to obtain approval (only one group member needs to apply). Your instructor will tell you whether s/he will be or you need to. When in doubt, please talk to your instructor.

Instructions and forms to apply for human ethics approval can be found at:

<http://umanitoba.ca/research/orec/ethics/guidelines.html>

In most cases, you will be using the "Protocol Submission Form" which is under the "REB Forms - Fort Garry Campus" heading.

It can take up to six weeks to process human ethics applications and obtain approval. Therefore, plan early. Note that approval must be obtained prior to data collection and cannot be obtained during the data collection phase or retroactively. Violation can get you, your instructor, and the Asper School in serious trouble with the REB.

If you will be collecting data only from other students in the class, you do not need REB approval. If you have any questions, please contact humanethics@umanitoba.ca or your instructor.

UNCLAIMED ASSIGNMENT POLICY

Pursuant to the FIPPA Review Committee's approved recommendations of August 15, 2007, all unclaimed student assignments will become the property of the faculty and will be subject to destruction six months after the completion of any given academic term.

STUDENT SERVICES AND SUPPORTS

The University of Manitoba provides many different services that can enhance learning and provide support for a variety of academic and personal concerns. You are encouraged to visit the below websites to learn more about these services and supports. If you have any questions or concerns, please do not hesitate to contact your instructor or the Graduate Program Office.

For Information on...	...follow this link
Course Outlines, Year-at-a-Glance, Concentrations, Textbooks, VW Dates and Final Exams	MFIN Course Information
Help with research needs such as books, journals, sources of data, how to cite, and writing	Library Resources
Tutors, workshops, and resources to help you improve your learning, writing, time management, and test-taking skills	Writing and Learning Support
Support and advocacy for students with disabilities to help them in their academic work and progress	Student Accessibility Services
Copyright-related questions and resources to help you avoid plagiarism or intellectual property violations	Copyright Office
Student discipline bylaws, policies and procedures on academic integrity and misconduct, appeal procedures	Academic Integrity
Policies & procedures with respect to student discipline or misconduct, including academic integrity violations	Student Discipline
Students' rights & responsibilities, policies & procedures, and support services for academic or discipline concerns	Student Advocacy
Your rights and responsibilities as a student, in both academic and non-academic contexts	Your rights and responsibilities
Full range of medical services for any physical or mental health issues	University Health Service
Information on health topics, including physical/mental health, alcohol/substance use harms, and sexual assault	Health and Wellness
Any aspect of mental health, including anxiety, stress, depression, help with relationships or other life concerns, crisis services, and counselling.	Student Counselling Centre

Support services available for help regarding any aspect of student and campus life, especially safety issues	Student Support Case Management
Resources available on campus, for environmental, mental, physical, socio-cultural, and spiritual well-being	Live Well @ UofM
Help with any concerns of harassment, discrimination, or sexual assault	Respectful Work and Learning Environment
Concerns involving violence or threats, protocols for reporting, and how the university addresses them	Violent or Threatening Behaviour

ACADEMIC INTEGRITY

I.H. Asper School of Business, The University of Manitoba

It is critical to the reputation of the I. H. Asper School of Business and of our degrees that everyone associated with our faculty behaves with the highest academic integrity. As the faculty that helps create business and government leaders, we have a special obligation to ensure that our ethical standards are beyond reproach. Any misconduct in our academic transactions violates this trust. The University of Manitoba Graduate Calendar addresses the issue of academic misconduct under the heading "Plagiarism and Cheating." Specifically, acts of academic misconduct include, but are not limited to:

- using the exact words of a published or unpublished author without quotation marks and without referencing the source of these words
- duplicating a table, graph or diagram, in whole or in part, without referencing the source
- paraphrasing the conceptual framework, research design, interpretation, or any other ideas of another person, whether written or verbal (e.g., personal communications, ideas from a verbal presentation) without referencing the source
- copying the answers of another student in any test, examination, or take-home assignment
- providing answers to another student in any test, examination, or take-home assignment
- taking any unauthorized materials into an examination or term test (crib notes)
- impersonating another student or allowing another person to impersonate oneself for the purpose of submitting academic work or writing any test or examination
- stealing or mutilating library materials
- accessing tests prior to the time and date of the sitting
- changing name or answer(s) on a test after that test has been graded and returned
- submitting the same paper or portions thereof for more than one assignment, without discussions with the instructors involved.

Many courses in the I. H. Asper School of Business require group projects. Students should be aware that group projects are subject to the same rules regarding academic misconduct. Because of the unique nature of group projects, all group members must exercise extraordinary care to insure that the group project does not violate the policy on Academic Integrity. Should a violation occur on a group project, all group members will be held jointly accountable, no matter what their individual level of involvement in the specific violation.

Some courses, while not requiring group projects, encourage students to work together in groups (or at least do not prohibit it) before submitting individual assignments. Students are encouraged to discuss this issue as it relates to academic integrity with their instructor to avoid violating this policy.

In the I. H. Asper School of Business, all suspected cases of academic misconduct involving a graduate student (i.e. MBA, MSc or PhD student) will be reported directly by the instructor to the Dean of the Faculty of Graduate Studies.

FACULTY BIOGRAPHY

I.H. Asper School of Business, The University of Manitoba

Alex Paseka

Assistant Professor of Finance

Department of Accounting and Finance

I.H. Asper School of Business

Dr. Alex Paseka is an assistant professor of Finance and received his Ph.D. in Finance in 2003 from University of Arizona. He taught at the University of Arizona before joining the Asper School of Business.

Dr. Alex Paseka has developed and taught a variety of finance courses at the Ph.D., Master, and undergraduate levels including International Finance, Corporate Finance, Investments, Options and Futures, Theory of Finance, Empirical Asset Pricing, Continuous-Time Finance, and Portfolio Management.

Dr. Alex Paseka does research in empirical and theoretical asset pricing, Bayesian econometrics, and asset pricing under incomplete information. He has published in *The Journal of Risk Finance*, *Financial Review*, *Journal of International Financial Markets, Institutions & Money*, *Journal of Mathematical Finance*, *Journal of Applied Statistical Science*, *Pacific-Basin Finance Journal* and others. His work appeared at numerous academic conferences including Northern Finance Association, Financial Management Association, Midwest Finance Association, Eastern Finance Association, Southwestern Finance Association annual meetings and many others. He has served as an ad hoc reviewer for several academic journals and conferences.