



## FIN 7152 (A01/G01) (3.0 CH) INVESTMENT POLICY WINTER 2023

## **INSTRUCTOR**

Name: Alex Paseka Phone: 204-474-8353 Email: alex.paseka@umanitoba.ca Office Location: Office Hours: Class Time:

Drake 474 by appointment (Zoom) Tuesdays 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).

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

#### COURSE MATERIALS

1. **Textbook**: Investments, 10th Canadian Edition, 2022, Bodie, Kane, Marcus, Switzer, Stapleton, Boyko, Panasian, McGraw-Hill, Inc., ISBN: 1260881253 · 9781260881257.

Please respect copyright laws. Photocopying textbooks or other reading material is a violation of copyright laws and is unethical unless permission to copy has been obtained.

- 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.
- 3. **END-OF-CHAPTER PROBLEMS (highly recommended)** 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. Solutions will be posted on UMLearn.

## LAB SESSION

This course will incorporate an in-class computer lab session. The outline lists the <u>tentative</u> 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.

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





NOTE: Class attendance is required. Missing more than 20% of this course due to absence from lectures may result in a failing grade. It is your responsibility to inform your professor, in advance if possible, of your absence and the reason for it:

 if <u>medical</u>, self-declaration form must be submitted for an illness lasting 5 consecutive days or less https://umanitoba.ca/governance/governing-documentsstudents#self-declaration-for-brief-or-temporary-student-absences, no later than 48 hours after the end of the brief absence; a medical note from your physician must be

- submitted for an illness lasting more than 5 days;
  if a <u>work commitment</u>, a signed letter on letterhead from your supervisor is required in advance, noting clearly the date(s) you must be away for your work commitment(s);
- 3) if for <u>student competitions</u>, an email from your Asper team coach must be received in advance indicating the dates you are away at competition.

## 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 18 (10:00 a.m.– 12:00 pm; Location: TBD)**. No makeup exam for the midterm will be given.

Both midterm and final exams will be closed book except as follows: a one-sided 8.5" x 11" sheet with anything handwritten on it can be taken to the midterm and a two-sided 8.5" x 11" sheet can be taken to the final. Formula sheets must be handwritten. No word-processed or photocopied material is allowed on your formula sheet. Improper formula sheets will be confiscated. You can (and should) also bring a financial calculator. The use of laptops and mobile phones is not permitted during the exams. Note: the final exam is cumulative.

## **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** (all four modules), **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 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. <u>The deadline for completion of the BMC course is midnight March 18.</u>

#### **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 and your written report describing your trading strategy and results. Further details about the investment challenge (such as written report requirements) will be distributed during the first week of classes.

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)

Торіс	Date	Chapter	Reminder
Introduction			
1. Introduction	Jan 24	5.1, 5.3-5.8	
2. Financial Markets and Instruments	Jan 24	2	
3. How Securities are Traded	Jan 31	3.2-3.3, 3.5	
<b>Fixed Income Securities</b> 4. Bonds – Valuation 5. Bonds – Term Structure of Interest Rates 6. Bonds – Duration and Portfolio	Feb 7 Feb 14 Feb 14	14 15 16	
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Management			
<b>Modern Portfolio Theory (MPT)</b> 7. Risk Aversion and Introduction to MPT	Feb 28, Mar 7	6, 7.1-7.4	
	February 21 - 24	No classes (Winte	er Term Break)
<b>LAB</b> Estimating the Markowitz Frontier and the Capital Market Line (CML)	Mar 14		Must be present with a laptop, Excel, and required add-inns
Mid-Term Exam Time: 10:00 a.m. – 12:00 p.m. Location: TBD	Saturday, Mar 18		
<b>Asset-Pricing Models</b> 8. The Capital Asset Pricing Model 9. Factor Models	Mar 21 Mar 21	9.1, 13.1, 13.3 8.1-8.3	
10. APT	Mar 28	10	
<b>Equity Derivatives</b> 11. Options – Introduction 12. Option Strategies and Payoffs 13. Option Pricing Models	Mar 28 Mar 29 Mar 29 – Apr 11	2.5, 20.1–20.2 20.3–20.4 21.1–21.5	
Project is due	Apr 11		By midnight
Final Exam Time: TBD Location: TBD	Date: 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: <u>http://umanitoba.ca/research/orec/ethics/guidelines.html</u>

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.

The following do not require REB approval:

- a) Projects where students are conducting the research on themselves during class time;
- Projects involving the use of records or information that is in the public domain, including the use of anonymous secondary data and surveys or questionnaires that have already been published;
- c) Projects involving the use of naturalistic observation where there is no reasonable expectation of privacy (i.e. public park).
- d) Practicum or job training projects where students are fully integrated into the organization's operational practices and are not conducting research;
- e) Projects where the intent is to use the information to provide advice, diagnosis, identification of appropriate interventions or general advice for a client;
- f) Projects where the intent is to develop skills which are standard practice within a profession (e.g. observation, assessment, intervention, evaluation, auditing); or
- g) Projects where the information gathering processes are part of the normal professional relationship between the student and the participants.

## If you have any questions, please contact <u>humanethics@umanitoba.ca</u> 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	Asper Graduate Student Resources
Exam Rescheduling Policy - <i>Please refer to Missing a Test/Exam on page 18 of the MBA Student Handbook</i>	MBA Student Handbook
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 Behavior





## 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
- o 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
- o copying the answers of another student in any test, examination, or take-home assignment
- o providing answers to another student in any test, examination, or take-home assignment
- o 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
- o stealing or mutilating library materials
- o accessing tests prior to the time and date of the sitting
- o 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, MFin, MSCM, 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

Associate Professor of Finance Department of Accounting and Finance I.H. Asper School of Business

Dr. Alex Paseka is an Associate Professor of Finance at the Department of Accounting and Finance of the Asper School of Business. He received his Ph.D. in Finance 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, Pasific-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.



