



General Course Information

Instructor: Nikola Gradojevic

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Office Location MacKinnon 734

Office Hours Wed 04:00PM-05:30PM or by appointment

Department/School Department of Economics and Finance

TA's ? ([Section 01](#)) and ? ([Section 02](#))

Email [@uoguelph.ca](#) and [@uoguelph.ca](#)

Office Location TBA

Office Hours TBA

Class Schedule: Mon, Wed: [Section 01](#): 02:30PM-03:50PM in MINS 300.
[Section 02](#): 05:30PM-06:50PM in MCKN 116.

Course Description

This course focuses on financial investments. We will take an in-depth look into the theory, application, and real-world evidence of financial investments. First, we will study how stock, bond, and currency markets work, and will review issues relating to the valuation of stocks and bonds. Then, we will focus on building optimal portfolios through dynamic asset allocation. We will also examine the risk-return relation in the cross-section of stocks, bonds, and currencies. In doing so, we will discuss the performance of popular portfolios based on size, value, and momentum. Finally, we will introduce some of the issues relating to financial derivatives.

Our point of view will be that of an investor, which defines the field of finance known as asset pricing. Everything we will do in this course is about understanding and analyzing real-world problems in asset pricing. Hence this course will have practical value to you whether you end up being a sophisticated professional investor or not.

Here is a sample of the questions we will address in this course:

- *How do financial markets work?*
- *How did various financial asset classes perform in our recent history?*
- *What determines the price of financial assets such as stocks and bonds?*
- *How can we build optimal portfolios and diversify risk?*

- *How do we measure risk and return? How is risk related to return? Are there ways to maximize our return, minimize our risk or both?*
- *Is the stock market predictable?*
- *Should we invest at home or abroad?*
- *What are derivatives and how do we value them?*

We will address these questions by designing lectures that focus on three aspects: building rigorous theory that provides our conceptual foundation; solving numerical problems so we can understand the calculations involved; and looking at the empirical evidence to see whether our theories actually work in the real world.

Finance is a quantitative subject. Therefore, to study finance we need to use some (rather basic) mathematics and statistics. However, we will do our best to keep the level of mathematical complexity to a minimum and explain new concepts from first principles. Finance is not a “spectator sport” and students are expected to develop the set of quantitative skills that will allow them to solve finance problems. The best way to absorb the ideas explained in the lectures is by “learning-by-doing”. Therefore, for every topic I will assign problems from the textbook. Students are expected to work out the problems on their own before we discuss them in class so that everyone can participate in the class discussion. Students are also encouraged to solve more problems on their own from the end of the assigned chapters.

Course Learning Outcomes

The Department of Economics and Finance *Learning Outcomes* for this course are:

Skills:

1. Written Communication: The empirical project will provide an opportunity for students to conduct an empirical application in Excel that evaluates either an asset pricing model or a dynamic asset allocation strategy. The empirical assignments will involve a written report. This is perhaps the most important component of this course.

2. Numerical Problem Solving: Students will learn how to implement advanced mathematical and statistical techniques to value stocks, options and other assets, analyze risk and return and build optimal portfolios, and how to solve other numerical problems in investments.

3. Problem solving in a Real-World Context: All finance topics taught in this course relate to how investors and companies act in the real world.

4. Computer Skills: The empirical project involves developing substantial skills in downloading and processing data, as well as in performing a statistical analysis using Excel.

Knowledge:

1. Mathematical methodology: Mathematical techniques will be used to value stocks and derivatives, measure risk and return and build portfolios.

2. Statistical and Econometric Methodology: Students will implement advanced mathematical and statistical techniques to value stocks, options, and other assets, analyze risk and return and build optimal portfolios.

3. Understanding of Specific Markets: Students will understand in depth how different financial markets function. They will critically analyze the main decisions faced by investors and will be making recommendations for individual investors and companies.

4. Historical and Global context: Historical performance of global financial markets will be investigated.

Indicative Content

LIST OF TOPICS

September 7	-
September 14	Course Orientation and Introduction to Investments The Investment Environment (Chapter 1)
September 21	Asset Classes and Financial Instruments (Chapter 2) How Securities are Traded (Chapter 3)
September 28	Risk, Return, and the Historical Record (Chapter 5) Capital Allocation to Risky Assets (Chapter 6)
October 5	Efficient Diversification (Chapter 7) Index Models (Chapter 8)
October 12	The Capital Asset Pricing Model (Chapter 9) Arbitrage Pricing Theory and Multifactor Models of Risk and Return (Chapter 10)
October 19	Midterm Exam (October 21, 2026 – in class; duration: 75 min)
October 26	The Efficient Market Hypothesis (Chapter 11) Behavioral Finance and Technical Analysis (Chapter 12)
November 2	Empirical Evidence on Security Returns (Chapter 13)
November 9	Macroeconomic and Industry Analysis (Chapter 17) Equity Valuation Models (Chapter 18)
November 16	Options Markets: Introduction (Chapter 20) Option Valuation (Chapter 21)
November 13	Futures Markets (Chapter 22)
November 30	International Diversification (Chapter 25)

Course Assessment

			Associated Learning Outcomes	Due Date/ location
Assessment 1:	30%	Midterm Exam	Numerical and analytical problem solving, understanding principles and concepts.	October 21, 2026, in class
Assessment 2:	30%	Empirical Assignments	Group work, computer skills, problem solving in a real-world context. <i>(Note: To be distributed later; from Holden)</i>	Early October and early November, 2026
Assessment 3:	40%	Final Exam	Numerical and analytical problem solving, understanding principles and concepts.	December ?, 2026 Location: TBA
Total	100%			

Midterm Exam – Notes:

The midterm exam will cover Chapters 1-3 and 5-10. It will contain 2-3 numerical problems, similar to those assigned in class.

The midterm exam date and time: it will be on **Thursday, October 21, 2026, in class.**

Empirical Assignment -- Notes:

This assignment will be done in groups of 4-5 students (individual assignments may be granted due to special circumstances). There will be two take-home Excel assignments over the semester, assigned in **early October** and **early November**, depending on the class progress. You will have a week to submit it. The assignments will be adapted from “Excel Modeling in Investments” by Craig W. Holden.

Spreadsheet modeling is an important skill that will serve you well in both your academic and professional careers. These exercises have been selected with the following goals in mind:

- Develop in you an appreciation for the power and many built-in features of spreadsheet programs,
- Enhance your understanding of key subject areas such as portfolio management, bond price behaviour, stock valuation modeling and option pricing,
- Develop in you the ability to conceptualize and build spreadsheet models to solve financial problems.

Your report must:

- Be type-written using MS-Word,
- Include embedded or attached Excel models,
- Include a title page addressed to me for the purposes of this course,
- Include a table of contents using electronically determined page numbers and built using the table of contents feature using styles built into the Word program,
- Include appropriate page headers and footers,
- Each page must be numbered electronically and the page number located in the footer in the same manner as found in this document.

In each report you must of course provide your completed spreadsheet model. The structure of your report should include the following general topic areas:

1. Introduction to the purpose of the spreadsheet model
2. Challenges encountered in the modeling process
3. Practical use (application) and the limitations of the spreadsheet model
4. Modeling techniques learned in this assignment
5. Financial concepts explored and reinforced in this assignment
6. Summary and conclusions
7. Embedded or appended Excel spreadsheets and charts/graphs.

Final Exam -- Notes:

The final exam will cover all the material taught in this course, but more emphasis will be given to topics covered after the midterm exam. It will contain 4-5 numerical problems, similar to those assigned in class.

The final exam date and time are set by the university: it will be on **December ?, 2026, from, Location: TBA.**

Course Resources

Required Text: None.

Recommended Texts:

“Investments” by Zvi Bodie, Alex Kane and Alan Marcus, 13th Edition, 2024 (**\$67.75**).

<https://www.mheducation.com/highered/product/investments-bodie-kane/M9781264412662.html>

“A Random Walk Down Wall Street, 13th Edition” by Burton G. Malkiel, W.W. Norton & Company, 2023 (**\$21.99**).

“A Non-Random Walk Down Wall Street” by Andrew W. Lo and A. Craig MacKinlay, Princeton University Press, 2002. (Chapters 1, 2, 9, 11, 12) (**\$29.19**).

Empirical assignment(s) will be adapted from the following text:

“Excel Modeling in Investments, 5th Edition” by Holden, C., Prentice Hall 2015 (**\$79.99**) – will be available at the UoG Library’s Reserve Collection.

Other Resources:

All other materials, including lecture notes and cases, will be posted on CourseLink and/or distributed in class.

Course Policies

Grading Policies

Unless you have discussed an extension well ahead of the due date with the instructor, late penalties of 5% of the total grade earned per day (including weekends) will be assigned to any assessment (i.e. deducted from the total mark). Extensions will only be granted on the basis of valid medical or personal reasons, and need to be requested via email to the instructor as soon as possible. Late assignments will not be accepted once graded assignments have been returned officially to the class at large, unless circumstances permit and alternative arrangements have been made.

Students who find themselves unable to meet course requirements by the deadlines or the criteria expected because of medical or personal reasons, should review the regulations on academic consideration in the Academic Calendar and discuss their situation with the instructor, program counselor or other academic counselor as appropriate.

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-grds.shtml>

Missed Assignments:

A grade of zero will be assigned if you fail to submit an assignment, unless you are ill or have other compassionate reasons. Please read your Graduate Calendar for the regulations regarding illness and compassionate grounds. Please note, vacation travel, moving house, or outside work commitments will not be accepted as valid reasons for missing deadlines.

If you have religious observances which conflict with the course schedule or if you are registered with Student Accessibility Services, please contact the course instructor in order to make arrangements for your assessment if appropriate.

University Policies

Illness

Medical notes will not normally be required for singular instances of academic consideration, although students may be required to provide supporting documentation for multiple missed assessments or when involving a large part of a course (e.g.. final exam or major assignment).

Academic Consideration

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons, please advise the course instructor in writing, with your name, id#, and e-mail contact. See the academic calendar for information on regulations and procedures for Academic Consideration:

<http://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml>

Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community, faculty, staff, and students to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring.

University of Guelph students have the responsibility of abiding by the University's policy on academic

misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection. Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it. Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The Academic Misconduct Policy is detailed in the Graduate Calendar:

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml>

Accessibility

The University of Guelph is committed to creating a barrier-free environment. Providing services for students is a shared responsibility among students, faculty and administrators. This relationship is based on respect of individual rights, the dignity of the individual and the University community's shared commitment to an open and supportive learning environment. Students requiring service or accommodation, whether due to an identified, ongoing disability or a short-term disability should contact Student Accessibility Services as soon as possible.

For more information, contact SAS at 519-824-4120 ext. 56208 or email sas@uoguelph.ca or see the website: <https://wellness.uoguelph.ca/accessibility/>

Course Evaluation Information

Please refer to the [Blue by Explorance system](#).

Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

Drop date

The last date to drop one-semester courses, without academic penalty, is **Friday, December 4, 2026**. For regulations and procedures for Dropping Courses, see the Academic Calendar:

<https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml>