



Carleton
University

Department
of Economics

**PLEASE NOTE THAT CHANGES COULD BE MADE TO THIS COURSE OUTLINE
UP TO SEPTEMBER 20, 2022**

ECON 5051 F –Asset Pricing

Professor M. Demers

Fall 2022

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Office Hours: Wednesday 10:00 a.m.-11:30 a.m.

Lecture Time: Wednesday 2:35 p.m. – 5:25 p.m.

Place: CO 211

Course Objectives:

1. To survey the literature on some of the most important issues in portfolio choice theory, and to learn the main approaches to the valuation and pricing of financial assets.
2. To initiate students to work with models in financial economics at the theoretical and quantitative level.

Reference Texts:

Jean-Pierre Danthine and John B. Donaldson. (2014) *Intermediate Financial Theory*, 3rd edition, Elsevier, (or 2nd ed., 2005). (Referred to as DD) Required textbook.

Jonathan Berk, Peter DeMarzo and David Stangeland (2018) *Corporate Finance* (Fourth Canadian Edition), Pearson Addison-Wesley. (Referred to as BDS)

John C. Hull, *Options, Futures, and Other Derivatives*. 10th edition, Pearson Prentice-Hall 2018.

Thomas E. Copeland, J. Fred Weston, and Kuldeep Shastri (2005), *Financial Theory and Corporate Policy*, Pearson Addison-Wesley. (Referred to as CWS)

Other Recommended Texts:

Simon Benninga, *Financial Modeling* Third Edition, MIT Press, 2008.

Kerry E. Back. *Asset Pricing and Portfolio Choice Theory*, Oxford University Press, 2010.

G.M. Constandinides, M. Harris and R. Stulz, eds, *Handbook of the Economics of Finance*, 2003. Referred to as HEF.

Jaksa Cvitanic and Fernando Zapatero, *Introduction to the Economics and Mathematics of Financial Markets*, MIT Press, 2004.

Chi-fu Huang and Robert H. Litzenberger. *Foundations for Financial Economics*, Prentice-Hall, 1988.

Jonathan E. Ingersoll Jr. *Theory of Financial Decision-making*. Totowa N.J. Rowman and Littlefield, 1987.

Andrei Shleifer. *Inefficient Markets an Introduction to Behavioral Finance*. Oxford University Press, 2000.

Additional readings may be given in class.

READING LIST

Required readings are indicated with a star (*). The coverage of some topics will depend on time availability.

1. Introduction to asset pricing: time, risk, efficient markets and valuation of cash flows

- * Lecture Notes
- * DD (3rd ed.): Chapters 1 and 2; (2nd ed.): Chapters 1 and 2
- * CWS, Chapters 1 and 2
- BDS, Chapter 4

2. Expected utility theory, measuring risk and risk aversion, investment decisions

- * Lecture Notes
- * Luce and Raiffa, *Games and Decisions*, Chapter 2.
- * DD (3rd ed.): Chapters 3 and 4; (2nd ed.): Chapters 3 and 4.
- * CWS, ch 3.

3. Optimal portfolio choice in the expected utility model

- * Lecture Notes
- * DD (3rd ed.): Chapter 5; (2nd ed.): Chapter 5

4. Mean-variance portfolio choice

- * Lecture Notes
- * DD (3rd ed.): Chapters 6 and 7; (2nd ed.): Chapter 6
- * CWS, Chapter 5
- BDS, Chapter 11
- Huang and Litzenberger, Chapter 3

5. The efficient portfolio frontier, the zero-covariance portfolio and other properties of optimal portfolios

- * Lecture Notes
- * DD (3rd ed.): Chapters 6, 7 and 8; (2nd ed.): Chapters 6 and 7.
- Huang and Litzenberger, Chapter 3

6. The capital asset-pricing model (CAPM)

- * Lecture Notes
- * DD (3rd ed.): Chapter 8, (2nd ed.): Chapter 7
- * CWS, Chapter 6
- BDS, Chapter 12

7. The arbitrage pricing theory (APT)

- * Lecture Notes
- * DD (3rd ed.): Chapter 14, DD (2nd ed.): Chapter 13
- * CWS, Chapter 6
- BDS, Chapter 13
- Eugene Fama and Kenneth French (1993) “Common risk factors in the returns on stocks and bonds” *Journal of Financial Economics*, 33, 3-56.
- Eugene Fama and Kenneth French (2012) “Size, Value and Momentum in international stock returns” *Journal of Financial Economics*, 33, 3-56.
- Eugene Fama and Kenneth French (2015) “A Five Factor Asset Pricing Model” *Journal of Financial Economics*, 116, 1-22.
- Eugene Fama and Kenneth French (2017) “International Tests of a Five Factor Asset Pricing Model” *Journal of Financial Economics*, 123, 441-63.

8. Arrow-Debreu pricing, market completeness and complex securities

- * Lecture Notes
- * DD, (3rd ed.): Chapters 9 and 11, (2nd ed.): Chapters 8 and 10

9. Consumption CAPM (CCAPM)

- * Lecture Notes
- * DD (3rd ed.): Chapter 10, (2nd ed.): Chapter 9

10. Options, risk neutral valuation and continuous time finance

- * Lecture Notes
- * DD, (3rd ed.): Chapters 11, 12 and 13, (2nd ed.): Chapters 10, 11, and 12
- BDS, Chapters 20 and 21.

11. Efficient markets and market volatility

- * Lecture Notes
- * CWS, ch 10 and 11
- Aswath Damodaran, “Market Efficiency: Definition and Tests,” <http://people.stern.nyu.edu/adamodar/pdfiles/invphiloh/mktefficiency.pdf>
- G. William Schwert, (2003) “Anomalies and Market Efficiency,” in HEF.
- Nicholas Barberis and Richard Thaler (2003), "A Survey of Behavioral Finance", in HEF.
- N. Jegadeesh, and S. Titman, (1993) “Returns to Buying Winners and Selling Losers: Implications for Stock Market Efficiency, *Journal of Finance*, 48, 65–91.
- Alan Timmerman and Clive Granger (2004) “Efficient Market Hypothesis and Forecasting,” *International Journal of Forecasting*, 15-27.
- Jonathan Lewellen and Jay Shanken (2002) “Learning, Asset-Pricing Tests” *Journal of Finance*, 1113-45.
- Pedro Barroso and Pedro Santa-Clara (2015) “Momentum has its Moments” *Journal of Financial Economics*, 116, 111-20.
- Kent Daniel and T. Moskowitz (2016) “Momentum Crashes” *Journal of Financial Economics*, 122, 221-47.
- Jonathan Berk and Jules van Binsbergen (2015) “Measuring Skill in the Mutual Fund Industry” *Journal of Financial Economics*, 118, 1-20.

Evaluation:

The basis for determining your final grade in this course is as follows:

Midterm exam	50%	Date: October 19
Final examination	50%	Date: Formally scheduled during the final examination period

The details of these evaluations will be announced in class and on Brightspace.

Students who miss the midterm exam for a valid reason (documented appropriately) will have the associated weight added to that of the final exam. Should the final exam be missed for any reason, a grade of F will be assigned, and the student must arrange for the possibility of a deferred examination through the Registrar's Office within 3 working days of the exam. If granted by the Registrar's Office, this exam will take place during the time designated in the Calendar. Special final exams (or mid-terms) will not be given.

Standing in a course is determined by the course instructor subject to the approval of the Faculty Dean. This means that grades submitted by the instructor may be subject to revision. No grades are final until they have been approved by the Dean. Application to write a deferred final examination must be made at the Registrar's Office.

Brightspace and e-mail:

This course will make use of Brightspace.

Lecture notes, review questions, problems, references to additional readings and any other material will be posted on Brightspace. Class announcements will be sent by e-mail using Brightspace.

It is each student's responsibility to check this website for posted material as well as the Carleton University email system for correspondence. If you do not have a Brightspace account, visit <https://carleton.ca/brightspace/>

Re-marking:

Any request for the remarking of exams or assignments must be submitted in writing within two weeks of that assignment or exam first being returned to the class. The request should contain a detailed explanation of why you feel you should receive a higher mark. Please note that remarking will apply to the entire assignment or exam, and not just to the contentious question. As a result, the revised mark may be higher than, lower than or the same as the original mark.

Plagiarism:

Please be aware that plagiarism is a serious offence at Carleton University.

[The University Academic Integrity Policy](#) defines plagiarism as "presenting, whether intentionally or not, the ideas, expression of ideas or work of others as one's own." This includes reproducing or paraphrasing portions of someone else's published or unpublished material, regardless of the source, and presenting these as one's own without proper citation or reference to the original source. Examples of sources from which the ideas, expressions of ideas or works of others may be drawn from include but are not limited to: books, articles, papers, literary compositions and phrases, performance compositions, chemical compounds, artworks, laboratory reports, research results, calculations and the

results of calculations, diagrams, constructions, computer reports, computer code/software, material on the internet and/or conversations.

Examples of plagiarism include, but are not limited to:

- any submission prepared in whole or in part, by someone else;
- using ideas or direct, verbatim quotations, paraphrased material, algorithms, formulae, scientific or mathematical concepts, or ideas without appropriate acknowledgment in any academic assignment;
- using another's data or research findings without appropriate acknowledgement;
- submitting a computer program developed in whole or in part by someone else, with or without modifications, as one's own; and
- failing to acknowledge sources through the use of proper citations when using another's work and/or failing to use quotations marks.

Plagiarism is a serious offence that cannot be resolved directly by the course's instructor. The Associate Dean of the Faculty conducts a rigorous investigation, including an interview with the student, when an instructor suspects a piece of work has been plagiarized. Penalties are not trivial. They can include a final grade of "F" for the course.

Intellectual Property Rights Regarding Course Material:

Please note: "Classroom teaching and learning activities, including lectures, discussions, presentations, etc., by both instructors and students, are copy protected and remain the intellectual property of their respective author(s). All course materials, including PowerPoint presentations, outlines, and other materials, are also protected by copyright and remain the intellectual property of their respective author(s). Students registered in the course may take notes and make copies of course materials for their own educational use only. Students are not permitted to reproduce or distribute lecture notes and course materials publicly for commercial or non-commercial purposes without express written consent from the copyright holder(s)." (See <https://carleton.ca/provost/2015/calendar-dates-and-course-materials-sharing-website/>)

Requests for Academic Accommodation:

You may need special arrangements to meet your academic obligations during the term. For an accommodation request, the processes are as follows:

Pregnancy obligation:

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Religious obligation:

Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, visit the Equity Services website: carleton.ca/equity/wp-content/uploads/Student-Guide-to-Academic-Accommodation.pdf

Academic Accommodations for Students with Disabilities:

If you have a documented disability requiring academic accommodations in this course, please contact the Paul Menton Centre for Students with Disabilities (PMC) at 613-520-6608 or pmc@carleton.ca for a formal evaluation or contact your PMC coordinator to send your instructor your Letter of Accommodation at the beginning of the term. You must also contact the PMC 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 your instructor as soon as possible to ensure accommodation arrangements are made. For more details, visit the Paul Menton Centre website carleton.ca/pmc

Survivors of Sexual Violence:

As a community, Carleton University is committed to maintaining a positive learning, working and living environment where sexual violence will not be tolerated, and its survivors are supported through academic accommodations as per Carleton's Sexual Violence Policy. For more information about the services available at the university and to obtain information about sexual violence and/or support, visit: carleton.ca/sexual-violence-support

Accommodation for Student Activities:

Carleton University recognizes the substantial benefits, both to the individual student and for the university, that result from a student participating in activities beyond the classroom experience. Reasonable accommodation must be provided to students who compete or perform at the national or international level. Please contact your instructor with any requests for academic accommodation during the first two weeks of class, or as soon as possible after the need for accommodation is known to exist. For more details, see [the policy](#).