



**Carleton  
University**

Department  
of Economics

**PLEASE NOTE THAT CHANGES COULD BE MADE TO THIS COURSE OUTLINE  
UP TO SEPTEMBER 17, 2024**

**ECON 5051 F –Asset Pricing**

**Professor M. Demers**

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**Office Hours: Wednesday 10:30 a.m.-11:30 a.m and online by appointment.**

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

**Course location and delivery mode : In person**

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**Fall 2024**

**Brightspace Course Page: <https://brightspace.carleton.ca/d2l/home/208468>**

### **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*, 3<sup>rd</sup> edition, Elsevier, (or 2<sup>nd</sup> 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*. 10<sup>th</sup> 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. Constantinides, 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 (3<sup>rd</sup> ed.): Chapters 1 and 2; (2<sup>nd</sup> 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 (3<sup>rd</sup> ed.): Chapters 3 and 4; (2<sup>nd</sup> ed.): Chapters 3 and 4.
- \* CWS, ch 3.

### 3. Optimal portfolio choice in the expected utility model

- \* Lecture Notes
- \* DD (3<sup>rd</sup> ed.): Chapter 5; (2<sup>nd</sup> ed.): Chapter 5

### 4. Mean-variance portfolio choice

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

## 6. The capital asset-pricing model (CAPM)

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

## 7. The arbitrage pricing theory (APT)

- \* Lecture Notes
- \* DD (3<sup>rd</sup> ed.): Chapter 14, DD (2<sup>nd</sup> 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, (3<sup>rd</sup> ed.): Chapters 9 and 11, (2<sup>nd</sup> ed.): Chapters 8 and 10

## 9. Consumption CAPM (CCAPM)

- \* Lecture Notes
- \* DD (3<sup>rd</sup> ed.): Chapter 10, (2<sup>nd</sup> ed.): Chapter 9

## 10. Options, risk neutral valuation and continuous time finance

- \* Lecture Notes
- \* DD, (3<sup>rd</sup> ed.): Chapters 11, 12 and 13, (2<sup>nd</sup> 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.

### Practice Problems:

Exams will be problem based.

Practice problems with solutions will be posted on Brightspace. Students are encouraged to work through as many problems as possible, since this is the best way to learn the course material and prepare for exams.

Solutions to some of these problems will be discussed in class. If necessary, videos will be posted to explain some solutions.

### Evaluation:

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

Midterm exam	50%	Date: October 16
Final examination	50%	Date: Formally scheduled during the final examination period

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

The midterm exam will take place in person in the classroom.

The final exam will also take place in person and will be formally scheduled by the university.

If you are absent for a midterm, email me as soon as possible to reschedule.

Students who miss the midterm exam for a valid reason (documented appropriately) Please email me as soon as possible. I reserve the right to request a Self-Declaration form or PMC letter of accommodation. The midterm's weight will be transferred 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.

### **Deferred Finals**

Students who do not write the final examination because of illness or other circumstances beyond their control may apply for to write a deferred final examination by contacting the Registrar's Office (RO) no later than three working days after the original final examination was scheduled. In the event that a student writes a deferred examination, the deferred examination will carry the same weight as the final examination in determining the course grade. Any deferred examination will not be identical to the original final examination.

Deferred finals (which must be applied for at the RO) are only available if the student is in good standing in the course, so if there is a minimum standard a student must meet in order to be in good standing, and entitled to write a deferred final exam, this standard must be stipulated here.

### **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, RESOURCES AND MENTAL HEALTH, ACADEMIC ACCOMODATIONS**

## Plagiarism

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, including the unauthorized use of generative AI tools (e.g., ChatGPT);
- 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.

For the full policy please refer to the [Academic Integrity Policy](#).

## Resources and Mental Health

**Statement on Student Mental Health:** As a University student you may experience a range of mental health challenges that significantly impact your academic success and overall well-being. If you need help, please speak to someone. There are numerous resources available both on- and off-campus to support you. Here is a list that may be helpful:

**Emergency Resources (on and off campus):** <https://carleton.ca/health/emergencies-and-crisis/emergency-numbers/>

### Carleton Resources:

- Mental Health and Wellbeing: <https://carleton.ca/wellness/>
- Health & Counselling Services: <https://carleton.ca/health/>
- Paul Menton Centre: <https://carleton.ca/pmc/>
- Academic Advising Centre (AAC): <https://carleton.ca/academicadvising/>
- Centre for Student Academic Support (CSAS): <https://carleton.ca/csas/>

- Equity & Inclusivity Communities: <https://carleton.ca/equity/>

### Off Campus Resources:

- Distress Centre of Ottawa and Region: (613) 238-3311 or TEXT: 343-306-5550, <https://www.dcottawa.on.ca/>
- Mental Health Crisis Service: (613) 722-6914, 1-866-996-0991, <http://www.crisisline.ca/>
- Empower Me: 1-844-741-6389, <https://students.carleton.ca/services/empower-me-counselling-services/>
- Good2Talk: 1-866-925-5454, <https://good2talk.ca/>
- The Walk-In Counselling Clinic: <https://walkincounselling.com>

### 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:** write to me 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 accommodation regarding a formally-scheduled final exam, you must complete the Pregnancy Accommodation Form ([click here](#)).

**Religious obligation:** write to me 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 [click here](#).

**Academic Accommodations for Students with Disabilities:** The Paul Menton Centre for Students with Disabilities (PMC) provides services to students with Learning Disabilities (LD), psychiatric/mental health disabilities, Attention Deficit Hyperactivity Disorder (ADHD), Autism Spectrum Disorders (ASD), chronic medical conditions, and impairments in mobility, hearing, and vision. If you have a disability requiring academic accommodations in this course, please contact PMC at 613-520-6608 or [pmc@carleton.ca](mailto:pmc@carleton.ca) for a formal evaluation. If you are already registered with the PMC, contact your PMC coordinator to send me your Letter of Accommodation at the beginning of the term, and 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 me to ensure accommodation arrangements are made. Please consult the PMC website for the deadline to request accommodations for the formally-scheduled exam (if applicable).

### 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 where 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: <https://carleton.ca/equity/sexual-assault-support-services>

### 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 will be provided to students who compete or perform at the national or international level. Write to me 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. <https://carleton.ca/senate/wp-content/uploads/Accommodation-for-Student-Activities-1.pdf>

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Short URL: <https://carleton.ca/economics/?p=44679>