# Department of Economics Carleton University

#### Winter 2025: ECON 4057 A - Behavioural Financial Economics

#### **Course Information**

<u>Professor:</u> Radovan Vadovic

D-896 Loeb, 613-520-2600 x 1509, radovan.vadovic@carleton.ca

Lectures: Tuesdays at 8:35-11:25AM (Log into Carleton Central to view the location

on your class schedule.)

Office hours: Tuesdays 15:00 – 16:00 or by appointment

Brightspace link: <a href="https://brightspace.carleton.ca/">https://brightspace.carleton.ca/</a>

#### **Prerequisites**

ECON 2030 with a grade of C- or higher, and ECON 3050 or BUSI 2501 or BUSI 2505 with a grade of C- or higher. Students who believe they have taken a similar background course or courses from another university must provide appropriate documentation to the Department of Economics Undergraduate Administrator.

#### **Course Description**

<u>Calendar description:</u> Market efficiency and the limits of arbitrage. Heuristics and biases identified by behavioural decision theorists and their effect on the behaviour of managers and investors. Behavioural theories of market trading volume and asset prices. Behavioural approaches to corporate financial economics problems.

Additional information: The course will focus on exploring the role of human psychology in economic decision-making with financial applications. Students will learn about several important psychological biases that influence the way people make choices, such as, gamblers and hot hand fallacy, loss aversion, temptation and present bias. Examples and in-class exercises will complement the discussion and will give students some tangible exposure to issues at hand.

#### **Readings**

Belsky, Gary & Tomas Gilovich: Why Smart People Make Biq Money Mistakes, Simon & Schuster, 2010. (The cost is approximately 25 CAD on amazon.ca as of 12/2024. Second-hand copies are acceptable.)

The course material will consist of the following items:

- 1. Required assigned readings (all will be posted on Brightspace);
- 2. Lecture notes/slides including the notes that you take in class.
- 4. Other notes and spreadsheets containing extra material (if I feel I need to provide extra material on various topics).

No additional materials are required.

#### **Examinations and Grading Policy**

Class Participation: 10%

Group project: 20%

Due on the 8<sup>th</sup> of April.

Midterm examination (in-class, 2 hours in duration): 30%

On Tuesday, the 11<sup>th</sup> of February.

Final examination (in-person 2 hours in duration): 40%

Formally scheduled by the university. (The final examination is not cumulative.)

Each evaluation item will be graded on a 100-point scale. The final scores will be combined using the weights above and then translated into an alphabetical final grade in accordance with the percentage equivalents described in the Undergraduate Calendar. If you have any questions about any graded assignment, please contact the instructor no later than 2 weeks after your grade has been posted on Brightspace.

Students who can document a compelling reason for failing to submit a graded assignment on time will be accommodated, and the weight of this assignment will then be spread over the remaining graded items in that category. Students must inform the instructor of their circumstances regarding missing a deadline in advance, if possible.

Failing to submit an assignment on the due date, by midnight of Ottawa time (ET), will carry a penalty of 10% per day for the next 5 days. After that, the score will drop to 0%.

<u>Group project</u>: Depending on the number of students, the class will be divided into several groups of approximately five students each. Each group will be assigned a topic (e.g., a chapter from the book by Belsky and Gilovich or another relevant source) and tasked with expanding the discussion in the assigned text in two directions:

- Add an additional insight from academic literature.
- Identify a practical example from a credible media source that illustrates how the behavioural bias appears in practice.

Each group will write a report of 7 to 10 pages, structured as follows:

- 1. Introduction (2–3 pages): Identify and describe the central behavioural bias discussed in the assigned text. Provide a representative example to illustrate how the bias works. Relate this discussion to concepts and material covered in class lectures.
- 2. Case Study (2–3 pages): Present a case study of how this bias shows up in practice. Use examples from credible media sources such as newspapers, magazines, or policy briefs, focusing on current or recent events. Don't forget to reference your sources.
- 3. Academic Insight (2–3 pages): Search recent academic literature (published since the assigned text) to identify one study that either adds a new theoretical insight, or provides relevant empirical evidence related to your behavioural bias.

Further instructions on this will be provided in class as needed. I may reserve some class-time for groups to work on their presentations.

You are allowed to use AI tools, such as ChatGPT, as a research assistant to find out information or learn about concepts. Direct transcription ("copy-and-paste") of AI generated text is not permitted. Warning: AI often generates misleading or wrong answers. But it sounds very confident about it. Always double check and verify the generated content. You are responsible for all content in your document, except for quoted text from other sources. Always make sure your sources are credible. AI is not a source to be quoted. Please reference any AI tool that you used to assist you.

<u>Participation</u>: Each time I collect a record of your participation in any type of class activity, such as, you turn in an assignment with a passing grade or you participate in a game or class exercise, you earn a participation point. Your participation score will be calculated as the number points earned during the term divided by the number of total points possible.

<u>Satisfactory performance criteria</u>: Students must fulfil all preceding course requirements in order to achieve a passing grade (D- or higher). Failing performance on participation and midterm examination class component (without a documented compelling reason) will result

in a grade of FND ("Failure with No Deferred final examination allowed"). Failure to write the final examination when the student has achieved satisfactory performance during the term will result in a grade of ABS ("ABSent from a required final examination"). 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 final examination is not available to students who have scored less than 60% on the midterm examination and/or participation components of the course.

#### **Learning outcomes**

- Become aware of several key psychological biases.
- Understand the interplay between extrinsic and intrinsic motivations in financial decision-making.
- Understand theoretical modeling of of psychological processes

### **Academic integrity**

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

• failing to acknowledge sources with 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 follows a rigorous <u>process for academic integrity</u> <u>allegations</u>, including reviewing documents and interviewing the student, when an instructor suspects a violation has been committed. Penalties for violations may include a final grade of "F" for the course.

#### **Plagiarism policy**

You are responsible for reading and knowing the information about plagiarism, Carleton University resources, and academic accommodations found: www.carleton.ca/economics/plagiarism-resources-and-accommodations.

#### Other policies

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).

As a 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. For more information, please consult <a href="https://wellness.carleton.ca/">https://wellness.carleton.ca/</a>

Carleton is committed to providing academic accessibility for all individuals. You may need special arrangements to meet your academic obligations during the term. The accommodation request processes, including information about the *Academic Consideration Policy for Students in Medical and Other Extenuating Circumstances*, are outlined on the Academic Accommodations website (<a href="https://students.carleton.ca/course-outline">https://students.carleton.ca/course-outline</a>).

Also consult equity services at <a href="www.carleton.ca/equity/accommodation">www.carleton.ca/equity/accommodation</a> and the Paul Menton Centre at <a href="www.carleton.ca/pmc/students/accommodations">www.carleton.ca/pmc/students/accommodations</a>.

## Academic calendar

## Tentative Outline of Topics:

Week 1: Introduction & Methods
Week 2: Markets
Week 3: Asset Markets Trading & Bubbles
Week 4: Herding & Information Cascades
Week 5: Representativeness Bias 1.
Week 6: Midterm Exam (Tuesday the 11 <sup>th</sup> of February)
Week 7: Fall break
Week 8: Representativeness Bias 2.
Week 9: Overconfidence
Week 10: Overconfidence (cont.) & Expected Utility
Week 11: Risk Aversion and Ambiguity Aversion
Week 12: Loss Aversion & Reference Dependence
Week 13: Present Bias & Temptation