

Behavioral Finance

Syllabus (*updated 11/20/2020*)

Term: Spring 2021

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Office hours: Wednesdays, 4:30-5:30pm ET or by appointment (online through Zoom, details on Canvas)

Teaching Assistants:

TBA

Prerequisites: FNCE 100 and FNCE 101 required;
FNCE 203 and FNCE 205 recommended.

Over the past several decades, the field of finance has developed a successful paradigm based on the notions that investors and managers were generally rational and the prices of securities were generally “efficient.” However, recent theoretical and empirical research has shown this paradigm to be insufficient to describe various features of actual financial markets and firm behavior. In this course, we will use insights from behavioral economics and psychology as well as other social sciences and more realistic economic settings to guide and develop alternative theories of financial market behavior and firm decision-making, while relying on the analytical and quantitative methods common to finance. We will examine how the insights of behavioral finance complement the traditional paradigm and shed light on investors' trading patterns, the often anomalous behavior of asset prices, and distortions in firm outcomes. The course will culminate in a capstone project, in which students will work on a solution of a behavioral bias or pursue a profitable investment opportunity.

Lectures

Section 001 Mon/Wed 1:30-2:50pm ET online through Zoom (details on Canvas)
 Section 002 Mon/Wed 3:00-4:20pm ET online through Zoom (details on Canvas)

Materials

Announcements, assignments, solutions, and other materials will be posted on the course Canvas website: [TBA](#)

There is, unfortunately, no single textbook that comprehensively covers all or the majority of topics discussed in this course. As a result, there is no required textbook for this class.

The textbooks and articles listed below provide in-depth coverage of certain topics and may be a useful source for the Capstone projects. Again, these are optional readings; all material needed to be successful in the course will be covered in class.

Useful textbooks:

- *Behavioral Finance: Insights into Irrational Minds and Markets*, by Montier (available in the bookstore)
- *Behavioral Corporate Finance*, by Shefrin

Academic overview articles (sufficiently easy to read!):

- *Psychology-based Models of Asset Prices and Trading Volume*, by N. Barberis, in Bernheim, D., DellaVigna, S., Laibson, D. (Eds.), *Handbook of Behavioral Economics*, North Holland, Amsterdam, October 2018. ([link](#))
- *Behavioral Corporate Finance: The Life Cycle of a CEO Career*, by M. Guenzel and U. Malmendier, in *Oxford Research Encyclopedia of Economics and Finance*, September 2020. ([link](#))
- *Behavioral Corporate Finance*, by U. Malmendier, in Bernheim, D., DellaVigna, S., Laibson, D. (Eds.), *Handbook of Behavioral Economics*, North Holland, Amsterdam, October 2018. ([link](#))

Alternative textbooks that can be useful:

- *Behavioral Finance: Understanding the Social, Cognitive, and Economic Debates*, by Burton and Shah
- *Beyond Greed and Fear: Understanding Behavioral Finance and the Psychology of Investing*, by Shefrin

Big picture overviews by the leaders of the field, each with their own focus:

- *Adaptive Markets: Financial Evolution at the Speed of Thought* by Andrew Lo
- *Animal Spirits* by Akerlof and Shiller

- *Thinking, Fast and Slow* by Daniel Kahneman.
- *Irrational exuberance* by Robert Shiller

Engaging historical account of how some of these ideas came about, and their influence to date:

- *The Undoing Project* by Michael Lewis

Detailed coverage of market anomalies and/or trading strategies based on them:

- *Expected Returns: An Investor's Guide to Harvesting Market Rewards*, by Antti Ilmanen
- *Quantitative Value: A Practitioner's Guide to Automating Intelligent Investing and Eliminating Behavioral Errors*, by Wesley Gray
- *The Missing Risk Premium: Why Low Volatility Investing Works*, by Erik Falkenstein

Narratives and specific episodes:

- *When Genius Failed* by Roger Lowenstein. Account of LTCM failure.
- *Big Bets Gone Bad* by Phillipe Jorion. Description of Orange County fiasco. *Capital Ideas* by Peter Bernstein. Short history of academic finance (now dated).
- *The Big Short: Inside the Doomsday Machine*, by Michael Lewis. The subprime blowup.

Requirements

1. There will be two exams (see Course Schedule below for tentative dates).
2. A final group project ("Capstone Project") will be due during the final exam period with group presentations during the last several weeks of class.
3. Problem sets, cases, and Canvas quizzes will be assigned on a regular basis.

All requirements are discussed in more detail below.

Attendance and Class Participation

1. Because no single textbook provides comprehensive coverage of all topics, readings are meant as an optional complement to, and not a substitute for the lectures. Class attendance is therefore vital.
2. You must attend the lecture for the section for which you are registered.
3. Class participation is essential for the success of the course. Your questions not only help me better judge how the class is absorbing the material, they also help generate discussion. To this same end, I may also cold-call.
4. I may not be able to answer all questions to your satisfaction in class, especially if the answer involves material beyond that lecture's content. I am always happy to discuss such questions during my office hours.

Please follow these additional rules for remote instruction:

- *Turn your camera on.*
- *Keep your microphone muted, unmute yourself to talk.*
- *Use chat to everyone (or host) if you would like to speak: “question”, “Q”, “comment” etc. Alternatively, use Zoom’s “raise hand” feature to signal that you have a question or comment.*

Canvas Discussion Boards

On Canvas, you will find discussion boards for the different course elements (lectures, exams, Capstone project, logistics). Instead of email, I ask that you please post questions about the course material or logistics on these boards. The TAs and I will regularly check the boards and answer your questions.

Of course, more sensitive questions that you don’t want shared with others are welcome over email. Please let me know of any difficulties you may be having with the course as soon as possible. These difficulties may arise from the course itself, or external forces (e.g., other courses, personal issues). Regardless of the source, let me know as soon as possible so we can work together to avoid larger problems later. Wharton and the University offer a wide range of support services that are geared towards helping students.

Help and Review Sessions

The teaching assistants will offer help and review sessions on a regular basis. The dates and times are yet to be confirmed.

Exams

There will be two examinations during the semester. Exams will be open book/open notes and will be administered through Canvas. The (tentative) dates are listed on the course schedule below. The second exam concentrates on material taught since the first exam, but material presented earlier may also appear on this exam.

Following university rules, exams may be postponed because of “illness, a death in the family, or some other unusual event.” If such a circumstance arises, you must petition the dean’s office for a makeup exam.

Capstone Project

The Capstone project is meant as a venue to apply the concepts and methods developed in class in a practical context. The goal of this group project is to develop an implementable idea that has potential to generate value in that context. Specifically, groups will take one of the following perspectives:

- a portfolio management team looking for a new trading strategy
- a consulting firm advising corporations on issues of investment and financial management
- an entrepreneurial start-up developing a retail financial product; further alternatives can be thought of – e.g., social entrepreneurship is a viable venue in some cases where profit opportunities are not available but correcting a bias would have great social value.

The specific topic/idea choice must be approved by me in advance. In each case, the main deliverable is in a form of a “pitch” to potential clients: institutional investors in the case of portfolio managers, corporate clients, or venture capitalists. This must contain the following elements:

1. Description of a behavioral anomaly to be exploited (or corrected). This must include specific behavioral biases and an explanation of how these biases lead to the observed behavior/anomaly, including why market forces alone may not act to eliminate them.
2. Description of the proposed strategy for taking advantage of this anomaly (e.g. in the case of asset mispricing) or for correcting the bias, either profitably or with benefit to society.
3. Evidence supporting the idea behind the proposed strategy (why should it succeed?)
4. Description of risks and challenges (why might it fail?)

The pitch will be delivered both in the form of an in-class group presentation and a formal write-up to be submitted by the due date. We will provide interim feedback on your progress along the way. The final Capstone project grade will take into account your incorporation of this feedback. In addition, group members will be asked near the end of the term to evaluate the team dynamics and participation of all group members (peer evaluation). This confidential evaluation may affect individual Capstone project grades.

Groups cannot exceed a maximum of four students, and given the emphasis on the Capstone project in this class, I strongly recommend a minimum of three students per group. All groups must be comprised of students from the same section.

I will provide more detailed instructions regarding the Capstone project, together with all important deadlines and a list of project ideas, in a separate document available on Canvas.

Assignments

Problem sets, cases, and Canvas quizzes will be assigned on a regular basis during the semester. All submissions will be online and will be due at noon ET, unless specified otherwise. Late answers will not be accepted. For problem sets and cases, you may work with other students in the class. As in the case of the Capstone project, group size is 4 students or less, and groups must be comprised of students from the same section. Each group only needs to submit one solution for a given problem set or case. Each group member will receive the same grade. All submissions will be through Canvas. Canvas quizzes are to be completed individually. Solutions to problem sets will be made available after the submission deadline. I will not discuss most of the problem sets in class, but the help and review sessions are structured to address your questions about the problem sets. The main purpose of the problem sets is to increase your understanding of the material. Cases will be discussed in class and your preparation is essential for these discussions. All assignments will be graded by giving a “check-plus,” “check,” “check-minus,” or “no credit.”

Grades

Scores on the two exams and the Capstone project will be standardized. Each student's final score is the weighted sum of these three standardized values, where the weights are 20% (exam 1), 20% (exam 2), and 50% (Capstone project, including incorporation of interim feedback and peer evaluation). Assignments (problem sets, cases, Canvas quizzes) and class participation contribute 10% to the final grade.

In addition, a student whose final grade is just below the margin between two letter grades may have their grade adjusted upward based on their work in assignments and class participation.

Tentative Course Schedule

subject to change

Date	Class	Topic	Assignments*
20-Jan	1	Introduction	
Asset Pricing			
25-Jan	2	Efficient Market Hypothesis	
27-Jan	3	Stock Market Puzzles and Anomalies	
1-Feb	4	Nonstandard Beliefs (I)	PS 1 due
3-Feb	5	Nonstandard Beliefs (II)	
8-Feb	6	Nonstandard Preferences (I)	Case 1 due
10-Feb	7	Nonstandard Preferences (II)	
15-Feb	8	Bounded Rationality	Canvas Quiz 1 due
17-Feb	9	Limits to Arbitrage and Degrees of Freedom Critique	
22-Feb		Exam 1 (administered through Canvas during a 24-hour window)	Capstone Project Check-In due
Corporate Finance			
24-Feb	10	Market Timing (I)	
1-Mar	11	Market Timing (II)	Case 2 due
3-Mar	12	Capstone Project Feedback Session	
8-Mar	13	Capstone Project Feedback Session	
15-Mar	14	Behavioral Managers: Why or Why Not?	Capstone Project Choice due
17-Mar	15	CEO Selection	
22-Mar	16	Managerial Biases and Firm Investment (I)	Canvas Quiz 2 due
24-Mar	17	Managerial Biases and Firm Investment (II)	
29-Mar	18	Managerial Biases and M&A (I)	PS 2 due
31-Mar	19	Managerial Biases and M&A (II)	
5-Apr	20	Managerial Biases and Financing Decision & Biases in Corporate Governance	
7-Apr		Exam 2 (administered through Canvas during a 24-hour window)	
12-Apr	21	Capstone Project Presentations	
14-Apr	22	Capstone Project Presentations	
19-Apr	23	Capstone Project Presentations	
21-Apr	24	Capstone Project Presentations	
26-Apr	25	Capstone Project Presentations	
28-Apr	26	Capstone Project Presentations	
6-May			Capstone Project Write-Up due**

* All assignments are due at noon ET except for assignments marked with ** which are due before midnight ET