הפקולטה לניהול ע"ש קולר אוניברסיטת תל אביב

Coller School of Management Tel Aviv University

## The Leon Recanati Graduate School of Business Administration

# 12313670 - Using Behavioral Economics to Gain Business Insights: Experimental Design and Critique

* Recommended prerequisites: a core course in economics and a course in research methods.

## First Semester (second half) – 2022/23

| Section | Day | Time Slot | Lecturer | Email | Telephone |
|---|---|---|---|---|---|
| 01 | Wednesday | 15:45-18:30 | Prof. Ayala Arad | aradayal@tauex.tau.ac.il | 03-6407158 |

**Office Hours**: Please email me to coordinate.

## Course Units

Course units: 1 YAS

1 course unit (YAS) = 4 ECTS units

The ECTS (European Credit Transfer and Accumulation System) is a framework defined by the European Commission to allow for unified recognition of student achievement across countries.

## Course Description

In this course you will be exposed to experimental research in behavioral economics, and will learn to evaluate it using critical thinking. The course covers some of the hottest topics in behavioral economics, as well as best practices of experimental design and how to use the insights from behavioral economics to achieve better outcomes in the business and public policy domains. We will discuss and critically evaluate the nature of strategic thinking in competitive environments; how the decision environment affects choice; how to incentivize desirable behavior; and other methods that can be used to steer behavior. Learning will be achieved using a hands-on format including class participation and assignments.

## Course Objectives

Upon course completion, the student will be able to:
1. Critically interpret results reported in academic papers in the field of behavioral economics.
2. Develop and analyze interventions to steer behavior.
3. Design experiments to answer research questions in behavioral economics.
4. Use insights from behavioral economics to address managerial problems, such as incentivizing employees, planning a menu of options to be presented to customers and choosing an R&D strategy in a competitive environment.

## Student Evaluation and Grade Composition

| Percentage | Assignment | Date | Group Size/Comments |
|---|---|---|---|
| 40% | Critical presentation of an academic paper | To be determined at the beginning of the course | 2-3 members per group. Description appears below. |
| 60% | Designing and presenting an experiment | | 2-3 members per group. Description appears below. |

* Grades for all tasks will be published only at the end of the course.
* Students are obligated to attend all classes. Students who are absent from class or do not actively participate in class may be removed from the course at the discretion of the lecturer. (Students will not be reimbursed for the course if they are removed.)

## Course Assignments

To successfully complete the course, the following two tasks must be completed:

**Task 1 (Critical presentation of an academic paper):** Students will present (in groups) a research paper assigned to them from the reading list. Standard articles will be presented in the following format:

A. Description of the research question.

B. Description of the relevant literature and the position of the research paper within it.

C. Description of the experiment or the model.

D. Description of the measurement tools used by the researchers.

E. Description of the research findings.

F. Ideas for applying the research insights in managerial settings.

G. Critique – Identifying the limitations of the article.

* Review or philosophical articles will be presented in a way that the students find appropriate.

About 15-20 minutes will be allocated for each presentation.

**Task 2 (Designing and presenting an experiment):** Students (in groups) will design an experiment and present it in class. The presentation will include:

A. A brief introduction: the topic, the experiment's goal, the importance of the research question and a review of the literature.

B. Description of the experiment: details of all parts of the experiment; a discussion of issues such as sampling, overcoming various biases, random assignment and measurement of dependent and independent variables. This is considered to be the core of the presentation.

C. An overall plan for analyzing the results: testing the hypotheses, the statistical analysis of the results and the type of conclusions that might be drawn.

* Note that the grade awarded for the assignments will be partly based on originality.

## Grading Policy

The Coller School of Management has adopted a grading policy that applies to all graduate level courses in order to establish a uniform standard for final course grades. This policy will be followed in determining the student's final grade in the course.
A description of this policy can be found on the School website.
Score Retention Policy

## Student Evaluation of the Course

Following completion of the course, the student will complete a survey to evaluate the instructor and the course, as well as to provide feedback that will be used to improve the course.

## Course Site (Moodle)

The course site will be the primary tool for conveying announcements and course material to the student. The course site will be updated regularly with information on classes, assignments and exams, and also after the completion of the course.
Course material will be available on the course site.
Please note that topics that are not included in the course material but are nonetheless discussed in class are considered to an integral part of the course.

## Course Outline*

| Class | Date | Topic | Comments |
|---|---|---|---|
| 1<br>2 | October 26, 2022 | Introduction, methodology discussion | |
| 3<br>4 | November 2, 2022 | The effect of the decision environment | Part of the class will be devoted to students' presentations of academic papers. A paper will be assigned to each group at the beginning of the course. |
| 5<br>6 | November 9, 2022 | Incentivizing behavior | |
| 7<br>8 | November 16, 2022 | Soft behavioral interventions | |
| 9<br>10 | November 23, 2022 | Strategic reasoning in competition | |
| 11<br>12 | November 30, 2022 | Experimental design and critique | Students' presentations of their research question and experimental design. |
| 13<br>14 | December 7, 2022 | Experimental design and critique | |

*Subject to change.

## Recommended Reading

The following list is divided into four sections, corresponding to the main topics of the course. Additional papers that relate to your research question in the second task may be required.

**Methodology and external validity**


Camerer, C. F. 2011. The Promise and Success of Lab-Field Generalizability in Experimental Economics: A Critical Reply to Levitt and List. *Handbook of experimental economic methodology.* New York, N.Y., Oxford University Press, 2015.

Camerer, C. F., and Hogarth, R. M. 1999. The Effects of Financial Incentives in Experiments: A Review and Capital-Labor-Production Framework. *Journal of Risk and Uncertainty*, 19, 7–42.

Charness, G., Gneezy, U., and Kuhn, M. A. 2012. Experimental methods: Between-subject and within-subject design. *Journal of Economic Behavior & Organization*, 81(1), 1–8.

Kessler, J. B., and Vesterlund, L. 2015. The External Validity of Laboratory Experiments: Qualitative Rather Than Quantitative Effects. *Handbook of Experimental Economic Methodology*. New York, N.Y., Oxford University Press, 2015.

Levitt, S. D., and List, J. A. 2007. What Do Laboratory Experiments Measuring Social Preferences Reveal About the Real World? *Journal of Economic Perspectives*, 21(2), 153-174.

Read, D. 2005. Monetary incentives, what are they good for? *Journal of Economic Methodology*, 12(2), 265-276.

Volisnky, A. and Azar, O. H. 2021. Incentives in experimental economics. *Journal of Behavioral and Experimental Economics*, 93.


**Strategic thinking in competitive environments**


Alaoui, L. and Penta, A. 2016. Endogenous Depth of Reasoning. *Review of Economic Studies*, 83 (4), 1297-1333.

Arad, A. and Rubinstein, A. 2012. The 11-20 Money Request Game: A Level-k Reasoning Study. *American Economic Review*, 102(7), 3561-3573.

Arad, A. and Rubinstein, A. 2012. Multi-Dimensional Iterative Reasoning in Action: The Case of the Colonel Blotto Game. *Journal of Economic Behavior & Organization*, 84(2), 571-585.

Avoyan, Ala & Schotter, Andrew, 2020. Attention in games: An experimental study. European Economic Review, 124(C).

Costa-Gomes, M. Crawford V., and Broseta, B. 2001. Cognition and behavior in normal-form games: an experimental study. *Econometrica*, 69, 1193-1235.

Crawford, V., Costa-Gomes, M. and Iriberri, N. 2013. Structural Models of Nonequilibrium Strategic Thinking: Theory, Evidence, and Applications. *Journal of Economic Literature*, 51(1), 5-62.

Osborne, M. and Rubinstein, A. 1998. Games with Procedurally Rational Players. *American Economic Review*, 88, 834-847.

**Incentivizing and steering behavior**


Arad, A., Gneezy, U. and Mograbi, E. 2021. Intermittent Incentives to Encourage Exercising in the Long Run. *Working paper*.

Ariely, D., Bracha, A. and Meier, S. 2009. Doing Good or Doing Well? Image Motivation and Monetary Incentives in Behaving Prosocially. *American Economic Review*, 99(1), 544-55.

Ariely, D., Gneezy, U., Loewenstein, G. and Mazar, N. 2009. Large stakes and big mistakes. *Review of Economic Studies,* 76, 451-469.

Charness, G. and Gneezy, U. 2009. Incentives to exercise. *Econometrica,* 77, 909-931.

Gneezy, U., Meier, S. and Rey-Biel, P. 2011. When and Why Incentives (Don't) Work to Modify Behavior. *Journal of Economic Perspectives*, 25(4), 191–210.

Gneezy, U. and Rey-Biel, P. 2014. On the relative efficiency of performance pay and non-contingent incentives. *Journal of the European Economic Association*, 12(1), 62–72.

Gneezy, U. and Rustichini, A. 2000. Pay Enough, or Don't Pay at All. *Quarterly Journal of Economics*, 115, 791–810.

Hogarth, R. and Villeval, MC. 2014. Ambiguous incentives and the persistence of effort: experimental evidence. *Journal of Economic Behavior & Organization,* 100(C), 1-19.


**The effect of the decision environment**


Arad, A. and Maltz, A. 2021. Turning-on Dimensional Prominence in Decision Making: Experiments and a Model. *Management Science* (forthcoming).

Azar, O. H. 2011. Do people think about absolute or relative price differences when choosing between substitute goods? *Journal of Economic Psychology*, 32(3), 450–457.

Bordalo, P., N. Gennaioli, and A. Shleifer. 2013. Salience and Consumer Choice. *Journal of Political Economy*, 121(5), 803–843.

Bushong, B., M. Rabin, and J. Schwartzstein. 2021. A model of relative thinking. *The Review of Economic Studies*, 88, 162–191.

Frederick, S., L. Lee, and E. Baskin. 2014. The Limits of Attraction. *Journal of Marketing Research*, 51(4), 487–507.

Huber, J., J. W. Payne, and C. Puto. 2014. Let's Be Honest About the Attraction Effect. *Journal of Marketing Research*, 51(4), 520–525.

Kő szegi, B. and A. Szeidl. 2012. A model of focusing in economic choice. *The Quarterly journal of economics*, 128(1), 53–104.

Shafir, E., Simonson, I. and Tversky, A. 1993. Reason-Based Choice. *Cognition*, 49, 11–36.

Simonson, I. 1989. Choice Based on Reasons: The Case of Attraction and Compromise Effects. *Journal of Consumer Research*, 16(2), 158–174.