

BACHELOR DEGREE: Economics

COURSE: **Behavioral Economics**

PROFESSOR: Kazuhiro Hara

CLASS LOAD: 30h

PREREQUISITE: None

OFFICE HOURS:

**CLASS TIME LOAD: Saturday Morning (2 consecutive classes of 1h45min each)**

## PROGRAM OF STUDIES

### 1. Topics

Rational Choice, Bounded Rationality, Utility Theory, Risk Preferences, Other-Regarding Preferences, Time Preferences, Games with Behavioral agents, Emotions

### 2. Objectives of the course

Objectives of the course includes:

1. introduce core ideas in behavioral economics.
2. develop deeper understanding of rationality assumptions and the role of economic theory
3. learn human behaviors inconsistent with the standard theory and understand limitations of it.
4. learn how ideas in behavioral economics explain such anomalies and expand the scope of economics.

### 3. Detailed programmatic content

1. Choice Theory
  - 1-1. Preference relation and Assumptions of Rationality
  - 1-2. Rational choice, Weak Axiom of Revealed Preference (WARP)
  - 1-3. Violation of WARP and Experiments
  - 1-4. Models of Boundedly Rational choice

2. Utility Theory
  - 2-1. Utility and Preference
  - 2-2. Utility functions in economic applications
  - 2-3. Existence of Utility representation
3. Risk and Uncertainty
  - 3-1. Expected Utility and the Independence axiom
  - 3-2. Violations of Expected Utility
  - 3-3. Non-expected Utility theories
  - 3-4. Prospect Theory
  - 3-5. Applications: Status quo bias, Loss Aversion,
4. Other-Regarding Preferences
  - 4-1. Experiments
  - 4-2. The Fehr-Schmidt model
  - 4-3. Alternative models
  - 4-4. Applications: Moral hazard, incomplete contracts
5. Time Preferences
  - 5-1. Discounted Utility Model
  - 5-2. The sign effects, magnitude effects, and common difference effects
  - 5-3. Present-Biased Preferences
6. Game Theory with Behavioral agents
  - 6-1. Quantal response equilibrium
  - 6-2. Cognitive Hierarchy Theory
  - 6-3. Cursed Equilibrium
  - 6-4. Social norms
7. Emotions
  - 7-1. Fear and Anxiety
  - 7-2. Temptation and Self-Control
  - 7-3. Confidence and Self-esteem

#### **4. Evaluation procedures**

The evaluation is based on problem sets and the final exam.

## 5. Reading List

Barberis, N., “The Psychology of Tail Events: Progress and Challenges,” *American Economic Review: Papers & Proceedings*, 2013, 103 (3), 611–16.

Camerer, C. F., and Ho, T., “Behavioral Game Theory Experiments and Modeling,” in “*Handbook of Game Theory with Economic Applications*,” Vol. 4 2015, chapter 10, pp. 517– 573.

Cassar, L., and Meier, S., “Nonmonetary Incentives and the Implications of Work as a Source of Meaning,” *Journal of Economic Perspectives*, 2018, 32 (3), 215–38.

Chabris, C., Laibson, D., and Schuldt, J. P., “Intertemporal Choice,” in “*Palgrave Dictionary of Economics*” 2008.

Crawford, V. P., “Boundedly rational versus optimization-based models of strategic thinking and learning in games,” *Journal of Economic Literature*, 2013, 51 (2), 512–527.

Crawford, V. P., Costa-Gomes, M. A., and Iriberry, N., “Structural models of nonequilibrium strategic thinking: Theory, evidence, and applications,” *Journal of Economic Literature*, 2013, 51 (1), 5–62.

Ellingsen, T., and Johannesson, M., “Paying Respect,” *Journal of Economic Perspectives*, 2007, 21 (4), 135–150.

Ericson, K., and Laibson, D., “Intertemporal Choice,” in “*Handbook of Behavioral Economics: Foundations and Applications 2*,” Vol. 2 2019, chapter 1, pp. 1–67.

Eyster, E., “Errors in Strategic Reasoning,” in “*Handbook of Behavioral Economics: Foundations and Applications 2*,” Vol. 2 2019, chapter 3, pp. 187–259.

Fehr, E., and Schmidt, K. M., “Theories of Fairness and Reciprocity: Evidence and Economic Applications,” in “*Advances in Economics and Econometrics: Eighth World Congress (Econometric Society Monographs)*,” Vol. 1 of *Econometric Society Monographs* 2003, pp. 208–257.

Gharad, B., Karlan, D., and Nelson, S., “Commitment devices,” *Annual Reviews of Economics*, 2010, 2 (1), 671–698.

O’Donoghue, T., and Sprenger, C., “Reference-Dependent Preferences,” in “*Handbook of Behavioral Economics: Foundations and Applications 1*,” Vol. 1 2018, chapter 1, pp. 1–77.

Rabin, M., “Incorporating Limited Rationality into Economics,” *Journal of Economic Literature*, 2013, 51 (2), 528–43.

Rabin, M., “An Approach to Incorporating Psychology into Economics,” *American Economic Review: Papers & Proceedings*, 2013, 103 (3), 617–622.

Rabin, M., “Psychology and Economics,” *Journal of Economic Literature*, 1998, 36 (1), 11–46.

Rabin, M., “A perspective on psychology and economics,” *European Economic Review*, 2002, 46 (4), 657 – 685.

Rabin, M., “The Experimental Study of Social Preferences,” *Social Research*, 2006, 73 (2), 405–428.

Shane, F., Loewenstein, G., and O’Donoghue, T., “Time discounting and time preference: A critical review,” *Journal of Economic Literature*, 2002, 40 (2), 351–401.

## 6. Professor Short Bio

Kazuhiro Hara has a Ph.D. in Economics. He is an assistant professor at FGV EPGE and teaches graduate and undergraduate courses. He does not work for government.