

**Behavioral Economics**  
**ECON 462-01, Fall 2013**

**Instructor**

Philipp Sadowski

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**Time and Location:** TTh 10:05am – 11:20am, SocPsych 128

**Office hours:** By appointment, SocSci 206

**Goal**

The primary goal of this course is an introduction to the insights gained from incorporating psychology into economic modeling, an approach referred to as Behavioral Economics.

Behavioral Economics is a relatively new field. We will gain an overview over the topics in this fast growing literature by sampling original contributions. This implies a lot of reading, so a secondary goal of the course is to learn how to efficiently digest and communicate the content of a scientific paper. To this end, each student will present at least one paper on the reading list in class.

**Final grade:** Graded problem sets (50%), presentation and participation (50%).

**Obvious Rules:** No phones, no food, and no internet in class. Laptops and tablets should be active only when you need to access an assigned reading. Notify me of absence as early as possible, use the short-term illness notification form for unexpected medical absence, and do not schedule on-campus interviews during class time. Students are expected to understand and uphold Duke's Community Standard, which can be found here:

<http://studentaffairs.duke.edu/conduct/about-us/duke-community-standard>.

**Requirements**

The work required for this class consists of the following components:

- **Readings:** Every paper on the reading list is a required reading, unless it is marked by \*, appears in a footnote or is explicitly excluded as the class progresses. Papers must be read before they are presented or covered in class and you must prepare a one paragraph summary of EACH paper and upload your summary to Sakai prior to class. For each paper we will randomly select one student whose summary will be graded. I will not accept late submissions and if you are selected your submission will be graded even if you are not present that day. The grade will be part of your participation grade. Papers marked by \* may be covered in class, but may be presented only in part or in a simplified way. You are not required to read those papers on your own. Note that the reading list might not be covered in its entirety and might change as the class progresses.
- **Assignments:** There will be six problem sets to accompany the content covered in class.
  1. Two assignments that will jointly cover the content of the entire course will be graded, and you are not allowed to collaborate on those!
  2. The four other problem sets will not be graded, but solutions will be posted a week after the homework is posted. The problem sets are hard and you should work through every assignment thoroughly, as otherwise you will not learn to solve the type of problems relevant for the graded problem sets. If you collaborate in groups larger than three people you will learn little from the problem sets. If you want feedback on your solution to a problem or need advice while trying to solve a particular problem, please feel free to ask, ideally first via email.
- **Presentation:** Each student will present at least one of the papers marked as "Student Presentation" in class. The time for each presentation is 30 minutes. This includes 20-25 minutes of presentation and 5-10 minutes of questions from the audience. The audience is encouraged to ask questions during the presentation. Then we will comment briefly on the style of presentation. Comments should be constructive. Participation in the discussion of other presentations impacts your presentation grade. The presentation slides should be posted on Sakai for my and other student's review within 24 hours after your presentation (if possible as a pdf file). Presentations will be assigned by the following procedure: we assign a random priority order to the class by drawing names in class. Each of you hands in a list with your name and a sequence of the numbers {1,2,...} of the Student Presentations on the reading list. After the end of drop and add we go through the following steps:

*Step 1.*—For each available paper, consider the students who have listed it as their *first* choice (if any) and assign it to the student who is highest in the priority order.

*Step k.*—For each paper that is not assigned yet, consider the students who have listed it as their *k*th choice (if any) and assign it to the student with the highest priority order.

The papers that are not assigned after the algorithm terminates are available for voluntary second presentations. If a student opts to give two presentations, only the better one will count towards the final grade.

## **Linked Readinglist** (*Please notify me of inactive links*)

### **1 Failures of the "Rational Man" Paradigm**

\*Rubinstein, A. (1998) "Bounded Rationality in Choice." Chapter 1 in "Modeling Bounded Rationality" Cambridge, MA. The MIT Press. <http://arielrubinstein.tau.ac.il/br/br.pdf>

### **2 Other regarding Preferences: Altruism, Fairness, Reciprocity, Shame**

#### **2.1 Evidence**

Camerer, C. and E. Fehr (2002) "Measuring Social Norms and Preferences using Experimental Games: A Guide for Social Scientists." IEER Working Paper No. 97

[http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=299143](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=299143)

Fehr, E. and S. Gächter (2000) "Fairness and Retaliation: The Economics of Reciprocity." *Journal of Economic Perspectives* 14, 159-181.<sup>1</sup>

<http://www.jstor.org/stable/pdfplus/2646924.pdf>

\* Dana, J., D.M. Cain and R. Dawes (2006) "What you don't know won't hurt me: Costly (but quiet) exit in a dictator game." *Organizational Behavior and Human Decision Processes* 100(2), 193-201. <http://ideas.repec.org/a/eee/jobhdp/v100y2006i2p193-201.html>

Bartling, B. and U. Fischbacher (2010) "Shift the Blame: On Delegation and Responsibility." mimeo. [http://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1166544](http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1166544)

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<sup>1</sup> For the original experiment see: Fehr, E. and S. Gächter (2000) "Cooperation and Punishment in Public Goods Experiments" *American Economic Review* 90, 980-994.

<http://www.jstor.org/stable/pdfplus/117319.pdf>

## **2.2 Models**

\* Fehr, E. and K. Schmidt (1999) "A Theory of Fairness, Competition and Cooperation." *Quarterly Journal of Economics* 114, 817-868. <http://www.jstor.org/stable/pdfplus/2586885.pdf>

\* Dillenberger, D. and P. Sadowski (2012) "Ashamed to be Selfish." *Theoretical Economics* 7, 99-124. <http://www.duke.edu/~ps78/documents/shame.pdf>

\* Rabin, M. (1993) "Incorporating Fairness into Game Theory and Economics." *American Economic Review* 83(5), 1281-1302. <http://www.jstor.org/stable/pdfplus/2117561.pdf>

## **2.3 Applications**

Student Presentation 1: Kahneman, D., J. Knetsch and R. Thaler (1986) "Fairness as a Constraint on Profit-Seeking: Entitlements in the Market." *American Economic Review* 74(4), 728-741. <http://www.jstor.org/stable/pdfplus/1806070.pdf>

Student Presentation 2: Krueger, A.B. and A. Mas (2004) "Strikes, Scabs and Tread Separations: Labor Strive and the Production of Defective Bridgestone/Firestone Tires." *Journal of Political Economy* 112(2), 253-289. <http://www.journals.uchicago.edu/doi/pdf/10.1086/381479?cookieSet=1>

# **3 Intrinsic Motivation versus Extrinsic Incentives**

## **3.1 Evidence**

Student Presentation 3: Kreps, D. (1997) "Intrinsic Motivation and Extrinsic Incentives." *American Economic Review* 87(2), 359-364. <http://www.jstor.org/stable/pdfplus/2950946.pdf>

Student Presentation 4: Frey, B. and R. Jegen (2001) "Motivation Crowding Theory: A Survey of Empirical Evidence." *Journal of Economic Surveys* 15(5), 589-611. <http://onlinelibrary.wiley.com/doi/10.1111/1467-6419.00150/pdf>

Student Presentation 5: Falk, A. and M. Kosfeld (2006) "The Hidden Costs of Control." *American Economic Review* 96(5), 1611-1630. <http://www.aeaweb.org/articles.php?doi=10.1257/aer.96.5.1611>

Student Presentation 6: Gneezy, U. and A. Rustichini (2004) "Incentives, Punishment, and Behavior." In C. Camerer, G. Loewenstein and M. Rabin eds. (2004) "Advances in Behavioral Economics." Russel Sage Foundation, Princeton, NJ; Princeton University Press.<sup>2</sup>

### **3.2 Models**

\* Benabou, R. and J. Tirole (2003) "Intrinsic and Extrinsic Motivation." *Review of Economic Studies* 70(3), 489-520. <http://www.princeton.edu/~rbenabou/papers/RES2003.pdf>

### **3.3 Applications**

Student Presentation 7: Carpenter, J. and C. Myers (2010) "Why Volunteer? Evidence on the Role of Altruism, Reputation, and Incentives." mimeo.

<http://sandcat.middlebury.edu/econ/repec/mdl/ancoec/1023.pdf>

## **4 Reference Dependence, Loss Aversion**

### **4.1 Evidence**

Student Presentation 8: Kahneman, D., J.L. Knetsch and R. Thaler (1990) "Experimental Tests of the Endowment Effect and the Coase Theorem." *Journal of Political Economy* 98(6), 1325-1348.

<http://www.jstor.org/stable/pdfplus/2937761.pdf>

Student Presentation 9: List, J. (2003) "Does Market Experience Eliminate Market Anomalies?" *Quarterly Journal of Economics* 118(1), 41-71.

<http://www.nber.org/~rosenbla/econ311/syllabus/listendowmenteffect.pdf>

### **4.2 Models**

\* Tversky, A. and D. Kahneman (1991) "Loss Aversion and Riskless Choice: A Reference Dependent Model." *Quarterly Journal of Economics* 106, 1040-1061.<sup>3</sup>

<http://www.jstor.org/stable/pdfplus/2937956.pdf>

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<sup>2</sup> For the original publication see: Gneezy, U. and A. Rustichini (2000) "Pay Enough or Don't pay at All." *Quarterly Journal of Economics*, 791-810. <http://www.jstor.org/stable/2586896>

<sup>3</sup> In most applications a person's reference point will be her expected future consumption. For a model that endogenously determines this reference point see: Koszegi, B. and M. Rabin (2006) "A Model of Reference-Dependent Preferences." *Quarterly Journal of Economics* 121(4), 1133-1166. <http://www.econ.berkeley.edu/~botond/refdep.pdf>

\* Frenkel, S., Y. Heller, and R. Teper (2012) "Endowment as a Blessing." mimeo.  
<http://www.pitt.edu/~rteper/Papers/endowment-blessing.pdf>

### **4.3 Applications**

Student Presentation 10: Mas, A. (2006) "Pay, Reference Points, and Police Performance." mimeo. <http://www.nber.org/papers/w12202.pdf>

## **5 Frames**

### **5.1 Evidence**

Student Presentation 11: Kahneman, D. and A. Tversky (1986) "Rational Choice and the Framing of Decisions." *Journal of Business* 59:4, 5251-78.  
<http://www.jstor.org/stable/pdfplus/2352759.pdf>

### **5.2 Models**

Student Presentation 12: Sher, S. and C. McKenzie (2006) "Information Leakage from Logically Equivalent Frames." *Cognition* 101, 467-494.  
<http://psy2.ucsd.edu/~mckenzie/Sher&McKenzie2006Cognition.pdf>

### **5.3 Applications**

Student Presentation 13: Johnson, E., J. Hershey, J. Meszaros, and H. Kunreuther (1993) "Framing, Probability Distortions, and Insurance Decisions." *Journal of Risk and Uncertainty* 7, 35-51. <http://www.springerlink.com/content/x535827t2m525776/fulltext.pdf>

## **6 Time Inconsistency, Self-Control**

Frederick, S., G. Loewenstein and T. O'Donoghue (2002) "Time Discounting and Time Preference: A Critical Review." *Journal of Economic Literature* 40(2), 351-401.  
<http://links.jstor.org/sici?sici=0022-0515%28200206%2940%3A2%3C351%3ATDATPA%3E2.0.CO%3B2-P>

### **6.1 Evidence**

Student Presentation 14: Ariely, D. and K. Wertenbroch (2002) "Procrastination, Deadlines, and Performance: Self Control by Precommitment." *Psychological Science* 13, 219-224.  
<http://web.mit.edu/ariely/www/MIT/Papers/deadlines.pdf>

Student Presentation 15: Della Vigna, S. and U. Malmendier (2006) "Paying not to go to the Gym." *American Economic Review* 96, 694-719.  
<http://www.ingentaconnect.com/content/aea/aer/2006/00000096/00000003/art00011>

## 6.2 Models

Student Presentation 16: O'Donoghue, T. and M. Rabin (2000) "The Economics of Immediate Gratification." *Journal of Behavioral Decision Making* 13, 233-250.

<http://www3.interscience.wiley.com/cgi-bin/fulltext/71004337/PDFSTART>

\* Gul, F. and W. Pesendorfer (2001) "Temptation and Self-Control." *Econometrica* 69, 6 1403-1435. <http://www.jstor.org/stable/pdfplus/2692262.pdf>

Rubinstein, A. (2003) "Economics and Psychology" The Case of Hyperbolic Discounting." *International Economic Review* 44, 1207-1216. <http://arielrubinstein.tau.ac.il/papers/67.pdf>

## 6.3 Applications

Student Presentation 17: Bernartzi, S. and R. Thaler (2004) "Save more tomorrow: Using Behavioral Economics to Increase Employee Saving." *Journal of Political Economy* 112, 164-187. <http://www.jstor.org/stable/pdfplus/10.1086/380085.pdf?acceptTC=true>

# 7 Overconfidence, Optimism, Magical Thinking

## 7.1 Evidence

Student Presentation 18: Camerer, C. and D. Lovallo (1999) "Overconfidence and Excess Entry: An Experimental Approach." *American Economic Review* 95(4), 1092-1118.

<http://www.jstor.org/stable/pdfplus/116990.pdf>

Student Presentation 19: Gneezy, U., M. Niederle and A. Rustichini (2003) "Performance in Competitive Environments: Gender Differences." *Quarterly Journal of Economics* 118, 1049-1074. <http://www.stanford.edu/~niederle/Gender.pdf>

## 7.2 Models

\* Benabou, R. and J. Tirole (2002) "Self-Confidence and Personal Motivation." *Quarterly Journal of Economics* 117(3), 871-915.

<http://www.princeton.edu/~rbenabou/papers/QJE2002.pdf>

\* Daley, B. and P. Sadowski (2013) "Foundations for Cooperation in the Prisoners' Dilemma." *mimeo*. <http://people.duke.edu/~ps78/documents/PD.pdf>

### 7.3 Applications

Student Presentation 20: Arabsheibani, G., D. de Meza, J. Maloney and B. Pearson (2000) "And a vision appeared unto them of a great profit: evidence of self-deception among the self employed." *Economic Letters* 67(1), 35-41. <http://ideas.repec.org/p/hol/holodi/9909.html>

## 8 Identity

\* Benabou, R. and J. Tirole (2011) "Identity, Morals and Taboos: Beliefs as Assets." *The Quarterly Journal of Economics*, 126, 805-855.

<http://www.princeton.edu/~rbenabou/QJE%202011.pdf>

Student Presentation 21: Akerlof, G. and R. Kranton (2000) "Economics and Identity." *Quarterly Journal of Economics* 115 (3), 715-753. <http://econ.duke.edu/~rek8/economicsandidentity.pdf>

## 9 Bounded Rationality: an Example

Rubinstein, A. (1998) "Choosing What to Know." Chapter 5 in "Modeling Bounded Rationality" Cambridge, MA. The MIT Press. <http://arielrubinstein.tau.ac.il/br/br.pdf>

## 10 Conceptual Controversy (not relevant for final exam, but participation in the discussion will influence presentation grade)

Thaler, R. and C. Sunstein (2003) "Libertarian Paternalism." *American Economic Review* 93(2), 175-179. <http://www.jstor.org/stable/pdfplus/3132220.pdf>

Glaeser, E. (2006) "Paternalism and Psychology." mimeo.

<http://ideas.repec.org/p/fth/harver/2097.html>

Gul, F. and W. Pesendorfer (2005) "The case for Mindless Economics." mimeo.

<http://www.princeton.edu/~pesendor/mindless.pdf>

## Preliminary Schedule

1. T 8-27: Section 1
2. Th 8-29: 'How to present a paper' and Section 1 continued
3. T 9-3: Section 2.1 (hand in priority order for Student Presentations)



4. Th 9-5: Section 2.1 continued
5. T 9-10: Section 2.2 (discuss presentation assignment)
6. Th 9-12: Section 2.2 continued
7. T 9-17: Section 2.1 continued and Section 2.2 continued
8. Th 9-19: Section 2.3 (Student Presentations 1 and 2)
9. T 9-24: Section 3.1 (Student Presentations 3 and 4)
10. Th 9-26: Section 3.1 continued (Student Presentation 5 and 6)
11. T 10-1: Section 3.2
12. Th 10-3: Section 3.3 (Student Presentation 7) and Section 4.1 (Student Presentation 8)
13. T 10-8: Section 4.1 continued (Student Presentation 9) and Section 4.3 (Student Presentation 10)
14. Th 10-10: Class Experiment

#### FALLBREAK

15. Th 10-17: Section 4.2
16. T 10-22: Section 4.2 continued
17. Th 10-24: Section 5.1 (Student Presentation 11) and Section 5.2 (Student Presentation 12)
18. T 10-29: Section 5.3 (Student Presentation 13) and Section 6.1 (Student Presentation 14)
19. Th 10-31: Section 6.1 continued (Student Presentation 15) and Section 6.2 (Student Presentation 16)
20. T 11-5: Section 6.2 continued and Section 6.3 (Student Presentation 17)
21. Th 11-7: Section 7.1 (Student Presentations 18 and 19)
22. T 11-12: Section 7.2
23. Th 11-14: Section 7.2 continued and Section 7.3 (Student Presentation 20)
24. T 11-19: Section 8.3 (Student Presentation 21) and Sections 8.1 and 8.2

- 25. Th 11-21: Section 9
- 26. T 11-26: Questions and Answers

THANKSGIVING

- 27. T 12-3: Section 10
- 28. Th 12-5: Spare time in case we fall behind or have to make up a class