

# PSY 304

## -Social Cognition: The Psychology of Interactive Minds-

**I. WHEN AND WHERE:** *Lecture:* Monday/Wednesday: 11:00am to 11:50am  
Location: PSH/PNI, Room A02

*Precept:* Wednesday, TBD  
Location: PSH/PNI, Room TBD

**II. INSTRUCTOR:** Alin Coman, Ph.D.  
Peretsman-Scully Hall, Room 529  
acoman@princeton.edu  
*Office hours:* by appointment

### **III. COURSE DESCRIPTION/OVERVIEW:**

Individuals are rarely isolated from one another. In our day-to-day lives, interactivity is ubiquitous, from communicating with one another, to jointly remembering the past, to coordinating our actions. Despite the fact that our minds are constantly in an interactive mode, most cognitive scientists investigate the mind/brain in tasks that involve complete isolation from others. Even social scientists who fully acknowledge that humans are social creatures tend to study cognition in isolation by simply presenting stimuli that are social in nature. This course is based on the assumption that exploring humans in interaction will lead to significant advances in understanding the mind. At the same time, it will illuminate the emergent properties of cognition at a collective level.

The Psychology of Interactive Minds brings together several strands of research with three main objectives: a) present interactivity as manifested at different levels, from neuroscience, to communication, to memory, and to action, b) feature novel methodological approaches aimed at studying interactivity in principled ways, and c) create bridges across the different subfields in the cognitive and the social sciences to facilitate the development of new experimental paradigms.

**Note:** This course will require designing experiments aimed at exploring how social interactions shape cognition, and, through these influences, drive large-scale dynamics. You will not need to conduct these experiments, but you'll have to present them in class as part of the mid-term evaluation.

**IV. GOALS:** This course is designed for undergraduate students who have an interest in exploring both how social interactions affect the mind, but also how the mind, through interaction, affects collective level outcomes. Each week, there will be two 50-minute lectures on relevant topics, as well as a precept in which students will have the opportunity to interact with some of the authors whose articles they will read.

*By the end of the course, students will:*

- Become familiar with experimental methodology investigating the human mind in interaction, from joint attention to joint remembering and to cooperative behavior.
- Become proficient in critically analyzing what constitutes promising research directions in this emerging field
- Be able to formulate empirical ideas and conduct research to explore minds in interaction

**V. GRADING:** Grading is distributed as follows:

- 1) Precept/Lecture participation: 35%, distributed as follows:
  - a. 20% reading summaries due by midnight of the day before the precept is scheduled (8 reading summaries in total)
  - b. 15% class participation (both Lecture and Precept)
- 2) Research project presentation: 30%, distributed as follows:
  - a. 15% midterm group presentation
  - b. 15% written research report due on December 20th
- 3) Final take-home exam: 35%

*Note:* Documents with guidelines for each of the following grading sections will be uploaded on Blackboard by the end of the first week of classes: 1) reading summaries, 2) precept presentations, and 3) research reports.

**VI. THE READING LIST:** Discussion topics and representative reading assignments are provided in what follows (all readings are posted on Blackboard). On occasion, authors of some of the articles will join us through Skype to tell us more about their work and to answer our questions.

## TOPICS & READINGS

### **Week 1: Introduction to interactive minds**

#### **Lecture 1 (Wed 09/14): Introduction to interactive minds**

Levine, J. M., Resnick, L. B., & Higgins, E. T. (1993). Social foundations of cognition. *Annual Review of Psychology*, 44, 585-612.

**Precept: NO PRECEPT**

### **Week 2: The cognitive perspective on social interactions**

#### **Lecture 1 (Mon 09/19): The cognitive perspective on social interactions I**

Burnes, B., & Cooke, B. (2013). Kurt Lewin's Field Theory: A Review and Re-evaluation. *International Journal of Management Reviews*, 15, 408–25.

#### **Lecture 2 (Wed 09/21): The cognitive perspective on social interaction II**

Rosenthal, R. (2003). Covert communication in laboratories, classrooms, and the truly real world. *Current Directions in Psychological Science*, 12 (5): 151–154.

Jones, E. E. (1986). Interpreting interpersonal behavior: The effects of expectancies. *Science*, 234, 41-46.

**Precept: Topic of the week: Where is the mind?**

Sparrow, B., Liu, J., & Wegner, D. M. (2011). Google effects on memory: Cognitive consequences of having information at our fingertips. *Science*, 333, 776-778.

### **Week 3: Perception in social contexts**

#### **Lecture 1 (Mon 09/26): Introduction to Social perception**

Hastorf, A. H.; Cantril, H. (1954). They Saw a Game: A Case Study. *Journal of Abnormal and Social Psychology* 49, (1): 129–134.

#### **Lecture 2 (Wed 10/28): Social Perception: constructivists vs. ecologists**

Asch, S. E. (1946). Forming impressions of personality. *The Journal of Abnormal and Social Psychology*. 41 (3): 258–290.

Ekman, P.; Friesen, W.V. (1971). Constants across cultures in the face and emotion. *Journal of Personality and Social Psychology*, 17: 124–129.

**Precept:** Topic of the week: Joint attention in group settings  
*Invited Skype guest: Garriy Shteynberg, University of Tennessee, Knoxville*

Shteynberg, G. (2010). A silent emergence of culture: The social tuning effect. *Journal of Personality and Social Psychology*, 99, 683-689.

#### **Week 4: From categorization to stereotyping**

##### **Lecture 1 (Mon 10/03): Categorization**

Rosch, E.H. (1973). Natural categories. *Cognitive Psychology*, 4, (3): 328–50.

##### **Lecture 2 (Wed 10/05): Stereotypes**

Macrae, N.C., Milne, A.B., Bodenhausen, G.V., (1994) Stereotypes as energy-saving devices: A peek inside the cognitive toolbox. *Journal of Personality and Social Psychology*, 66(1) 37-47.

Fiske, S.T.; Cuddy, A.J.C.; Glick, P. (2006). Universal dimensions of social cognition: warmth and competence. *Trends in Cognitive Sciences*, 11 (2): 77–83.

**Precept:** Topic of the week: Propagation of stereotypes

Lyons, A. & Kashima, Y. (2003). How are stereotypes maintained through communication? The influence of stereotype sharedness. *Journal of Personality and Social Psychology*, 85, 989-1005.

#### **Week 5: From individual to collective memories**

##### **Lecture 1 (Mon 10/10): Social aspects of memory**

Tversky, B, & Marsh, E. (2000). Biased retelling of events yield biased memories. *Cognitive Psychology*, 40, 1–38.

Schacter, D., L., Guerin, S.A., and St. Jaques, P. (2011). Memory distortion: an adaptive perspective. *Trends in Cognitive Sciences*, 15, 467-474.

##### **Lecture 2 (Wed 10/12): Joint remembering and collective forgetting**

Hirst, W., & Echterhoff, G. (2012). Remembering in conversations: The social sharing and reshaping of memories. *Annual Review of Psychology*, 63, 55-69.

Cuc, A., Koppel, J., & Hirst, W. (2007). Silence is not golden: A case for socially shared retrieval-induced forgetting. *Psychological Science, 18*, 727–733.

**Precept:** Topic of the week: SoPHIE: a platform to study the emergence of collective emotions, memories and beliefs

**Week 6: Decision-making**

**Lecture 1 (Mon 10/17): System 1 vs. System 2**

Kahneman, D. (2011). *Thinking fast and slow*. Macmillan Publishers (Chapters 1-5)

**Lecture 2 (Wed 10/19): Heuristics and biases**

Tversky, A., Kahneman, D. (1974). Judgment under Uncertainty: Heuristics and Biases, *Science, 185* (4157), 1124-1131.

**Precept:** Topic of the week: Modes of thinking influence religious beliefs  
*Invited Skype guest:* Eldar Shafir (*Princeton University*) or Anandi Mani (*Warwick University*)

Mani, A., Mullainathan, S., Shafir, E., & Zhao, J. (2013). Poverty impedes cognitive function. *Science, 341*, 976-980.

**Week 7: (MIDTERM WEEK)**

**Lecture 1 (Mon 10/24): MIDTERM PROJECT PRESENTATIONS**

**Lecture 2 (Wed 10/26): MIDTERM PROJECT PRESENTATIONS**

**NO PRECEPT**

**Week 8: (FALL RECESS)**

## **Week 9: Social cognition in the brain(s)**

### **Lecture 1 (Mon 11/07): Neuroscience of social cognition I**

Adolphs R (1999). Social cognition and the human brain. *Trends in Cognitive Science*, 3:469-479.

Saxe R., Kanwisher N. (2003). People thinking about thinking people: fMRI investigations of theory of mind. *NeuroImage*, 19:1835-1842.

### **Lecture 2 (Wed 11/09): Neuroscience of social cognition II**

*Invited Speaker: Diana Tamir, Princeton University*

Tamir, D.I., Thornton, M.A., Contreras, J.M., Mitchell, J.P. (2016). Neural evidence that three dimensions organize mental state representation: rationality, social impact, and valence. *Proceedings of the National Academy of Sciences*, 113(1), 194-199.

### **Precept: Topic of the week: The interactivity of social cognition**

Stephens G.J., Silbert L.J., Hasson U. (2010) Speaker-listener neural coupling underlies successful communication. *Proceedings of the National Academy of Sciences*, 107(32), 14425-14430.

## **Week 10: The psychology of social influence**

### **Lecture 1 (Mon 11/14): Social influence: the science of behavior change**

Cialdini, R. B., & Goldstein, N. J. (2004). Social influence: Compliance and conformity. *Annual Review of Psychology*, 55, 591-621.

Bond, R.M., C.J. Fariss, J.J. Jones, A.D.I. Kramer, C. Marlow, J.E. Settle and J.H. Fowler (2012). A 61-million-person experiment in social influence and political mobilization. *Nature*, 489(7415): 295–298.

### **Lecture 2 (Wed 11/16): Social influence: the science of information propagation**

Barrett, J. & Nyhof, M. (2001). Spreading non-natural concepts. *Journal of Cognition and Culture*, 1, 69-100.

Harber, K.D. & Cohen, D.J. (2005). The Emotional Broadcaster theory of social sharing. *Journal of Language and Social Psychology*, 24, 382-400.

**Precept:** Topic of the week: What propagates in social networks?  
(Facebook exercise)

Berger, J. (2011). Arousal increases social transmission of information. *Psychological Science*, 22(7): 891-893.

Barasch, A, Berger, J. (2014). Broadcasting and Narrowcasting: How Audience Size Affects What People Share. *Journal of Marketing Research*, 51, 286 - 299.

## **Week 11: The development of social cognition**

### **Lecture 1 (Mon 11/21): The development of social cognition**

Herrmann, E., Call, J., Lloreda, M., Hare, B., & Tomasello, M. (2007). Humans have evolved specialized skills of social cognition: The cultural intelligence hypothesis. *Science*, 317, 1360-1366.

Tomasello, M., Carpenter, M., Call, J., Behne, T., & Moll, H. (2005). Understanding and sharing intentions: The origins of cultural cognition. *Behavioral and Brain Sciences*, 28, 675–735.

### **Lecture 2 (Wed 11/23): NO CLASS-THANKSGIVING**

### **NO PRECEPT-THANKSGIVING**

## **Week 12: Moral cognition**

### **Lecture 1 (Mon 11/28): Morality and moral communities**

Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*. 108, 814-834.

Hofmann, W., Wisneski, D. C., Brandt, M. J., & Skitka, L. J. (2014). Morality in everyday life. *Science*, 345(6202), 1340-1343.

### **Lecture 2 (Wed 11/30): Sacred values and intergroup conflict**

Ginges, J., Atran, S., Medin, D. and Shikaki, K. (2007). Sacred bounds on rational resolution of violent political conflict. *Proceedings of the National Academy of Sciences* 104, 7357-7360.

Atran, S., Axelrod, R., & Davis, R (2008). Sacred barriers to conflict resolution. *Science*, Vol. 317(5841), pp. 1039-1040.

**Precept:** Topic of the week: Religion and sacred values

Sheikh, H., Ginges, J., Coman, A., & Atran, S. (2012). Religion, group threat and sacred values. *Judgment and Decision Making*, 7(2), 110–118.

**Week 13: Empathy and its role in social life**

**Lecture 1 (Mon 12/05): Perspective taking/Empathy**

Iacoboni, M. (2009). Imitation, Empathy, and Mirror Neurons. *Annual Review of Psychology*, 60: 653-670

Galinsky A.D., Maddux W.W., Gilin D., White J.B. (2008) Why it pays to get inside the head of your opponent - The differential effect of perspective taking and empathy in negotiations. *Psychological Science*, 19: 378–384.

**Lecture 2 (Wed 12/07): Improving theory of other minds**

*Invited Speaker: David Kidd, New School for Social Research*

Kidd, D.M. & Castano, E. (2013). Reading Literary Fiction Improves Theory of Mind. *Science*, 342, 377-380.

**Precept:** Topic of the week: Empathy

*Invited Skype guest: Jamil Zaki, Stanford University*

Schumann, K., Zaki, J., & Dweck, C. (2014). Addressing the Empathy Deficit: Beliefs about the Malleability of Empathy Predict Effortful Responses when Empathy is Challenging. *Journal of Personality and Social Psychology* 107(3), 475-493.

**Week 14: Culture and cognition**

**Lecture 1 (Mon 12/12): Culture and cognition**

DiMaggio, P. (1997). Culture and cognition. *Annual Review of Sociology*, 23(1): 263–287.

Nisbett, R., Peng, K.; Choi, I.; Norenzayan, A. (2001). Culture and Systems of thought: Holistic vs. analytic cognition. *Psychological Review*. 108 (2): 291–310

Gelfand, M. J., Raver, J. L., Nishii, L., Leslie, L. M., Lun, J., Lim, B. C. et al. (2011). Differences between tight and loose cultures: A 33-nation study. *Science*, 332, 1100-1104.

**Lecture 2 (Wed 12/14): The social construction of reality: Putting it all together**