

## NUMERACY

Syllabus, O'Neil Center Reading Group

Spring 2018

### Books

Daniel Kahneman. 2011. *Thinking, Fast and Slow*. New York: Farrar, Straus and Giroux.

Levitt, Steven D. and Stephen J. Dubner. 2014. *Think Like a Freak*. New York: HarperCollins.

Mlodinow, Leonard. 2008. *The Drunkard's Walk: How Randomness Rules Our Lives*. New York: Pantheon Books.

Silver, Nate. 2012. *The Signal and the Noise: Why So Many Predictions Fail – But Some Don't*. New York: Penguin Press.

Surowiecki, James. 2004. *The Wisdom of Crowds*. New York: Anchor Books.

Taleb, Nassim N. 2007. *The Black Swan: The Impact of the Highly Improbable*. New York: Random House.

Tetlock, Philip and Dan Gardner. 2015. *Superforecasting: The Art and Science of Prediction*. New York: Crown.

Ziliak, Stephen T. and Deirdre McCloskey. 2008. *The Cult of Statistical Significance: How the Standard Error Costs Us Jobs, Justice, and Lives*. Ann Arbor: University of Michigan Press.

### 2/8 Week 1. Introduction I

1. Ch. 2, Levitt and Dubner 2014.

2. Ch. 8, Mlodinow 2008.

3. Optional, low difficulty video on regression: <https://www.youtube.com/watch?v=LTqFq9wtcdI>

### 2/15 Week 2. Introduction II

1. Ch. 2-3, Silver 2012.

2. Conversations With Tyler Episode: <https://soundcloud.com/conversationswithtyler/nate-silver> Or: <https://www.youtube.com/watch?v=tMA7F4FA94>

### 2/22 Week 3. The Bayesian Paradigm

1. Ch. 5 & 8, Silver 2012.

### 3/8 Week 4. Some Ways in Which You Are Not Bayesian Updating Correctly

1. Ch. 6, Mlodinow 2008.
2. Ch. 11, 16, & 21, Kahneman 2011.
3. Collins, Jason. 2017. "Rationalizing the 'Irrational.'" *Behavioral Scientist*, <http://behavioralscientist.org/rationalizing-the-irrational/>
4. Econtalk Episode: [http://www.econtalk.org/archives/2008/03/vernon\\_smith\\_on\\_1.html](http://www.econtalk.org/archives/2008/03/vernon_smith_on_1.html)

### 3/22 Week 5. Efficient Market Hypothesis and Prediction Markets

1. Introduction and Ch. 1, Surowiecki 2004.
2. Ch. 11, Silver 2012.
3. Hanson, Robin. 2013. "Shall We Vote on Values, But Bet on Beliefs?" *Journal of Political Philosophy* 21, no. 2: 151-178.
4. Econtalk Episode: [http://www.econtalk.org/archives/2012/01/fama\\_on\\_finance.html](http://www.econtalk.org/archives/2012/01/fama_on_finance.html)

### 3/29 Week 6. Superforecasting I

1. Ch. 1-2, Tetlock and Gardner 2015.
2. Econtalk episode: [http://www.econtalk.org/archives/2015/12/philip\\_tetlock.html](http://www.econtalk.org/archives/2015/12/philip_tetlock.html)

### 4/5 Week 7. Superforecasting II

1. Ch. 3 & 5, Tetlock and Gardner 2015.

### 4/12 Week 8. The Econometrics Establishment

1. Joshua D. Angrist and Jorn-Steffen Pischke. 2010. "The Credibility Revolution in Empirical Economics: How Better Research Design is Taking the Con out of Econometrics." *Journal of Economic Perspectives* 24, no. 2: 3-30.
2. Leamer, Edward E. 2010. "Tantalus on the Road to Asymptopia." *Journal of Economic Perspectives* 24, no. 2: 31-46
3. Econtalk episode: [http://www.econtalk.org/archives/2014/12/joshua\\_angrist.html](http://www.econtalk.org/archives/2014/12/joshua_angrist.html)

### 4/19 Week 9. And Its Critics

1. Ch. 1, Ziliak and McCloskey 2008.
2. Ch. 15, Taleb 2007

3. Hayek, F.A. 1989. "The Pretence of Knowledge." *American Economic Review* 79, no. 6: 3-7.
4. Econtalk episode: [http://www.econtalk.org/archives/2007/04/taleb\\_on\\_black.html](http://www.econtalk.org/archives/2007/04/taleb_on_black.html)

#### 4/26 Week 10. The Replication Crisis

1. Ioannidis, John P. A., T. D. Stanley, and Hristos Doucouliagos. 2017. "The Power of Bias in Economics Research." *The Economic Journal* 127: F236-F264.
2. Gelman, Andrew and Eric Loken. 2014. "The Statistical Crisis in Science." *American Scientist* 102, no. 6: 460-465.
3. Susan Dominus. 2017. "When the Revolution Came for Amy Cuddy." *The New York Times Magazine*, <https://www.nytimes.com/2017/10/18/magazine/when-the-revolution-came-for-amy-cuddy.html>
4. Econtalk episode: [http://www.econtalk.org/archives/2017/03/andrew\\_gelman\\_o.html](http://www.econtalk.org/archives/2017/03/andrew_gelman_o.html)