Books by Scott Page

1. Page, Scott, Ken Kollman and John Miller, eds. *Computational Models of Political Economy*. MIT Press, 2002.

This book features recent research on Computational Political Economy, with a focus on theoretical models. Each chapter is a model involving agents. Examples include corporate decision-making, voting, candidate positioning, and more.

http://www.amazon.com/Computational-Political-Economy-Kenneth-Kollman/dp/B005Q81ZHI/ref=sr_1_1?s=books&ie=UTF8&qid=1352343876&sr=1-1&keywords=scott+page+computational+models+of+political+economy

2. Page, Scott. *The Difference: How the Power of Diversity Creates Better Groups, Firms, Schools, and Societies*. Princeton University Press, 2007.
  - Translated to Japanese 2008.

The Difference is about how people think in groups. Why do groups of diverse individuals outperform brilliant individuals working alone? Why is our collective wisdom so much greater than the sum of its parts? Page demonstrates that progress and innovation depend on diverse people working together on problems.

http://www.amazon.com/Difference-Diversity-Creates-Schools-Societies/dp/0691138540/ref=sr_1_1?s=books&ie=UTF8&qid=1352343778&sr=1-1&keywords=scott+page

3. Page, Scott and Miller, John. *Complex Adaptive Systems: An Introduction to Computational Models of Social Life*. Princeton University Press, 2007.
  - Translated to Chinese 2008.

A clear and accessible account of Complex Adaptive Systems, with focus on theoretical and practical applications in Social Science. This book provides introductions to concepts such as emergence, automata, networks, diversity, and feedback, among others.

http://www.amazon.com/Complex-Adaptive-Systems-Introduction-Computational/dp/0691127026/ref=sr_1_3?s=books&ie=UTF8&qid=1352343829&sr=1-3&keywords=scott+page

4. Page, Scott. *Diversity and Complexity.* Princeton University Press, 2010.

This book is about the role of diversity in Complex Adaptive Systems. This is a slightly more technical account of how diversity provides system robustness, responds to external shocks, and even leads to tipping points.

http://www.amazon.com/Diversity-Complexity-Primers-Complex-Systems/dp/0691137676/ref=sr_1_2?s=books&ie=UTF8&qid=1352343829&sr=1-2&keywords=scott+page

The Short List: Ten Enjoyable, Accessible Books (Not Much Math)

1. Bishop, Bill. *The Big Sort: Why the Clustering of Like-Minded America is Tearing Us Apart.* New York: Houghton Mifflin, 2008.

This book gives an account of the "sorting" model that we contrasted with "peer effects." Bishop argues that Americans have been sorting themselves into politically and ethnically homogenous communities, leading to ideological polarization.
(Section 2 – Segregation and Peer Effects)

http://www.amazon.com/Big-Sort-Clustering-Like-Minded-America/dp/0547237723/ref=sr_1_1?s=books&ie=UTF8&qid=1352343560&sr=1-1&keywords=bill+bishop

2. Christakis, Nicholas A. , and James. H. Fowler. *Connected: The Surprising Power of Our Social Networks and How They Shape Our Lives.* New York: Little, Brown and Company, 2009.

It's all in the title – Connected is about social networks influencing our lives in terms of health, happiness, wealth, and much more. It's about how behavior spreads, emotion is contagious, and how the 2-friends we covered in class mean more to our lives than we might think. ***(Section 2 – Segregation and Peer Effects)***

http://www.amazon.com/Connected-Surprising-Networks-Friends-Everything/dp/0316036137/ref=sr_1_2?s=books&ie=UTF8&qid=1352343498&sr=1-2&keywords=connected

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

This book became hugely popular last year. Written by Nobel Prize winner Daniel Kahneman, it gives us a tour of the decision-making methods in the brain, contrasting to systems – the fast (or behavioral) system and the slow (rational) system.
 (Section 5 – Thinking Electrons)

http://www.amazon.com/Thinking-Fast-Slow-Daniel-Kahneman/dp/0374275637/ref=sr_1_1?s=books&ie=UTF8&qid=1352343599&sr=1-1&keywords=thinking+fast+and+slow

4. Mokyr, Joel. *Gifts of Athena: Historical Origins of the Knowledge Economy.* Princeton: Princeton University Press, 2002.

This book on knowledge economy shows how the growth explosion and expansion of "useful" knowledge in the modern West was driven not just by the rise of technological developments, but also by improved access to these technologies in society.
(Section 9 – Diversity and Innovation)

http://www.amazon.com/Gifts-Athena-Historical-Origins-Knowledge/dp/0691120137/ref=sr_1_3?s=books&ie=UTF8&qid=1352343627&sr=1-3&keywords=mokyr

5. Schelling, Thomas C. *Micromotives and Macrobehavior.* New York: W.W. Norton and Co., 1978.

This book was published more than 30 years ago, but its insights remain exciting today. Schelling demonstrates how small, seemingly inconsequential "micro" actions can lead to unintended results for the group.
(Section 2 – Segregation and Peer Effects)

http://www.amazon.com/Micromotives-Macrobehavior-Thomas-C-Schelling/dp/0393329461/ref=sr_1_2?s=books&ie=UTF8&qid=1352343657&sr=1-2&keywords=schelling

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

Large groups of people are smarter than groups of just a few, no matter how much knowledge and experience the latter group has. Surowiecki delves into an array of fields to demonstrate how this deceptively simple idea can drive innovation, community, and success.

http://www.amazon.com/Wisdom-Crowds-James-Surowiecki/dp/0385721706

7. Tetlock, Phillip. *Expert Political Opinion, How Good is it? How Can we Know?* Princeton: Princeton University Press, 2005.

Tetlock asks whether experts can accurately predict political phenomena, and contrasts various methods of forecasting, analyzing which are more or less successful. Tetlock argues that thinkers who draw from a number of fields and rely on an eclectic array of methods will be the better forecasters. **(Section 1 – Why Model?)**

http://www.amazon.com/Expert-Political-Judgment-Good-Know/dp/0691128715/ref=sr_1_1?s=books&ie=UTF8&qid=1352343683&sr=1-1&keywords=tetlock

8. Thaler, Richard H., and Cass R. Sunstein. Nudge: *Improving Decisions about Health, Wealth, and Happiness.* New York: Penguin, 2009.

People often make poor decisions that make them poorer, less healthy, less safe, and so on. The authors explain that this is because humans are susceptible to biases that lead us to make wrong decisions related to personal finance, education, family, and even planet Earth. **(Section 5 – Thinking Electrons)**

http://www.amazon.com/Nudge-Improving-Decisions-Health-Happiness/dp/014311526X/ref=sr_1_1?s=books&ie=UTF8&qid=1352343710&sr=1-1&keywords=thaler+sunstein+nudge

9. Wolfram, Stephen. *A New Kind of Science.* Champaign: Wolfram Media, 2002.

This seminal book by respected scientist Stephen Wolfram introduces us to a set of discoveries that come from computer experiments, and can be used to address a wide array of problems in science, such as the Second Law of thermodynamics, complexity in biology, and much more. Highly recommended. ***General – more math than others.***

http://www.amazon.com/New-Kind-Science-Stephen-Wolfram/dp/1579550088/ref=sr_1_1?s=books&ie=UTF8&qid=1352343726&sr=1-1&keywords=wolfram

10. Mauboussin, Michael. *The Success Equation: Untangling Skill and Luck in Business, Sports, and Investing.* Harvard Business Review Press, 2012.

A great new book by Michael Mauboussin about skill and luck, and how we can tell which is at play in various scenarious involving business and investing. ***(Section 15: Randomness and Random Walks)***

http://www.amazon.com/The-Success-Equation-Untangling-Investing/dp/1422184234

Five Papers for Further Reading

Section 12 (Coordination and Culture): Bednar's Model

Bednar, Jenna, Aaron Bramson, Andrea Jones-Rooy and Scott Page. "Emergent cultural signatures and persistent diversity: A model of conformity and consistency." *Rationality and Society,* 2010 22: 407-444. 2010.

Section 6 (Categorical and Linear Models): When Linear Models are Wrong

Dawes, Robyn M. "The robust beauty of improper linear models in decision making." *American Psychologist*, Vol 34(7), Jul 1979, 571-582.

Section 17 (Prisoners' Dilemma): No Panaceas

Ostrom, Elinor. "Going Beyond Panaceas." *Proceedings of the National Academy of Sciences of the United States of America,* 104(39), pp.15176-15178, 2007.

Section 7 (Tipping Points): Tipping Points

Lamberson, P.J., and Scott E. Page. "Tipping Points." *Quarterly Journal of Political Science,* 2012, 7: 175–208

Section 9 (Diversity and Innovation): No Free Lunch

Wolpert, D.H., Macready, W.R. "No Free Lunch Theorems for Optimization." *IEEE Transactions on Evolutionary Computation,* 67(1), 1997.