# CYBER POLITICS IN INTERNATIONAL RELATIONS Theory, Methods & Policy

## Fall 2013

## Professor Nazli Choucri Dr. David D. Clark

Department of Political Science with nchoucri@mit.edu

Computer Science & Artificial Intelligence Lab (CSAIL) ddc@csail.mit.edu

## **OUTLINE**

## **PART I: CONTENT & CONTEXT**

1	September 9	Introduction – Cyberspace & International Relations	NC,DC
2	September 16	Construction of Cyberspace – Links with International Relations	DC, NC
3	September 23	Evolution of International Relations – Theory & Systems	NC
4	September 30	Control Points & Cyber Politics – Where, When & Why	DC
5	October 7	Cyber Access, Globalization & World Order	NC
		PART II: ACTORS, PROCESSES & INSTITUTIONS	
6	October 21	Dynamics of Tranformation and Change	DC
7	October 28	Globalization and Cyber Security	NC
8	November 4	Cyber Conflicts – Cases, Contentions & Attacks	DC, NC
9	November 18	Cyber Cooperation & International Institutions	NC, DC
		PART III: STRATEGY, POLICY & FUTURES	
10	November 25	Evolving Global Agenda – WSIS & WCIT-2012	NC
11	December 2	Private Order & Cyber Governance	DC
12	December 9	Alternative Futures in Cyberpolitics	NC

# 17.447/17.448 Course Requirements

Class attendance and participation is required.

Please choose one of the following:

- 1. Three short literature review & critique papers (Due October 1, November 8, and December 9).
- Take Home Final (essays open book one required question for all, and a choice of two questions among several distributed on the last day of class, Monday 12/9/2013 and due the following Friday 12/13/2013.
- 3. Research paper—topic focus, abstract, outline to be reviewed by the instructors. This choice will need to take into account the assigned readings and indicate (1) relevance to your research or (2) research relevance to the topics.

Please make your decisions as soon as possible.

#### **List of Course Books**

- MIT Coop (available for purchase)
- On Reserve at Dewey Library E53.

Choucri, Nazli. 2012. *Cyberpolitics in International Relations*. Cambridge, MA: MIT Press.

Chadwick, Andrew and Philip N. Howard, eds. 2010. *The Routledge Handbook of Internet Politics*. New York: Routledge.

Jackson, Robert and Georg Sørensen, eds. 2013. *Introduction to International Relations: Theories and Approaches.* Oxford: Oxford University Press.

## **Required and Recommended Materials:**

Available on the Course Stellar-site

**Please Note:** Chapters from the course books (listed above) are <u>not</u> reproduced on Course Stellar-site.

# (1) Introduction – Cyberspace and International Relations

September 9, 2013

## Required

Abbott, Kenneth W. and Duncan Snidal, 2001. "Hard and Soft Law in International Governance." In L. Goldstein, Miles Kahler, Robert O. Koehane, and Anne-Marie Slaughter, eds. *Legalization and World Politics*. Cambridge, MA: The MIT Press, pp. 37-72.

Choucri, Nazli, 2012. *Cyberpolitics in International Relations*. Cambridge, MA: MIT Press, Chapter 2.

Jackson, Robert and Georg Sørensen, eds. 2013. *International Relations: Theories and Approaches*. Oxford: Oxford University Press, Chapters 1 ("Why Study IR?"), 3 ("Realism") and 7 ("International Political Economy: Contemporary Debates.")

## Recommended

Braman, Sandra. 2006. *Change of State*. Cambridge, Mass: The MIT Press, Chapters 1, 2, and 3.

Hess, Charlotte, and Elinor Ostrom eds. 2007. *Understanding Knowledge as a Commons: From Theory to Practice*. Cambridge, Mass: The MIT Press. Chapters 1 and 3.

Jackson, Robert and Georg Sørensen. 2013. *International Relations: Theories and Approaches*. Oxford: Oxford University Press, Chapter 2 ("IR as an Academic Subject").

## (2) Construction of Cyberspace – Links with International Relations

September 16, 2013

## Required

Clark, David D. and Marjory S. Blumenthal. 2011. "The End-to-End Argument and Application Design: The Role of Trust." *Federal Communications Law Journal*. Volume 63-2.

Kobrin, S.J. 2001. "Territoriality and the governance of cyberspace." *Journal of International Business Studies*. Vol. 32, no. 4, 18.

Lessig, L. 1996. "The zones of cyberspace." *Stanford Law Review*. Vol. 48, 1403-1411, May.

Zittrain, Jonathan L. 2006. "The generative internet." Harvard Law Journal, Vol. 119.

## Recommended

Eriksson, Johan and Giampiero Giacomello. 2004. "The Information Revolution, Security, and International Relations: (IR) Relevant Theory?" *International Political Science Review*. July 2006, 221-244.

Clark, David D. 2004. "An Insider's Guide to the Internet." *MIT Computer Science and Artificial Intelligence Laboratory, Version 2.0*. July 25, 2004. Cambridge, MA: Massachusetts Institute of Technology.

Skoudis, Edward. 2009. "Evolutionary Trends in Cyberspace." In Kramer, Franklin D., Stuart H. Starr, and Larry K. Wentz, eds. *Cyberpower and National Security*. Washington, DC: NDU Press and Potomac Books, 147-170

## (3) Evolution of International Relations – Theory & Systems

September 23, 2013

## Required

Jackson, Robert and Georg Sørensen. 2013. *International Relations: Theories and Approaches*. Oxford: Oxford University Press, Chapter 10 ("Key Issues in Contemporary IR").

Choucri, Nazli. *Cyberpolitics in International Relations*. Cambridge, MA: MIT Press. Chapters 3 and 4.

May, Christopher. 2010. "Globalizing the logic of openness: open source software and the global governance of intellectual property" in Chadwick, Andrew and Philip N. Howard, eds. *The Routledge Handbook of Internet Politics*. New York: Routledge.

Kahler, M., ed. 2009. *Networked Politics: Agency, Power, and Governance*. Ithaca: Cornell University Press, Chapters 1 and 11.

#### Recommended

Kay, Sean. 2012. *Global Security in the Twenty First Century*. London: Rowman and Littlefield Publishers. Chapters 1, 2 and 3.

Zacher, Mark W. 2001. "International Organizations." in *The Oxford Companion to Politics of the World*. 2nd edition. Joel Krieger, ed.. Oxford: Oxford University Press, 418-420.

# (4) Control Points & Cyber Politics – Where, When & Why

September 30, 2013

## Required

Benkler, Y. 2007. *The Wealth of Networks*. New Haven: Yale University Press. Chapters 2 and 4.

Kohl, Uta. 2007. *Jurisdiction and the Internet: Regulatory Competence over Online Activity*. Cambridge, UK: Cambridge University Press. Chapter 1.

Clark, David. "Control Point Analysis." *TPRC submission* version 2.2 of September 10, 2012. Cambridge, Mass: Massachusetts Institute of Technology.

Gandy Oscar H. and Kenneth Neil Farrall. 2010. "Metaphoric reinforcement of the virtual fence: factors shaping the political economy of property in cyberspace." In Chadwick, Andrew and Philip N. Howard, eds. *The Routledge Handbook of Internet Politics*. New York: Routledge.

Mayer, Franz C. 2001. "Review Essay: The Internet and Public International Law – Worlds Apart." *EJIL* 12, no. 3: 617-622.

Zittrain, Jonathan. 2012. "Internet Points of Control." *Boston College Law Review* 653 (2003). http://lawdigitalcommons.bc.edu/bclr/vol44/iss2/10

## Recommended

Diebert, Ronald J. 2013." The geopolitics of Internet control: censorship, sovereignty and cyberspace." In Chadwick, Andrew and Philip N. Howard, eds. *The Routledge Handbook of Internet Politics*. New York: Routledge.

Jackson, Robert and Georg Sørensen, 2013. *International Relations: Theories and Approaches*. Oxford: Oxford University Press, Chapters 6 ("International Political Economy: Classical Theories") and 7 ("International Political Economy: Contemporary Debates.".

## (5) Cyber Access, Globalization and World Order

October 7, 2013

## Required

Cerny, Philip G., 1995. "Globalization and the Changing Logic of Collective Action." *International Organization* 49, no. 4: 595-625.

Choucri, Nazli, 2012. Cyberpolitics in International Relations. MIT Press, Chapters 7 and 8.

Shepsle, Kenneth A. 1989. "Studying Institutions: Some Lessons from the Rational Choice Approach", *Journal of Theoretical Politics* 1(3) (April): 131---147.

Dutton, William and Malcolm Peltu, 2010. "The New Politics of the internet: multistakeholder policy-making and the internet technocracy." In Chadwick, Andrew and Philip N. Howard, eds. *The Routledge Handbook of Internet Politics*. New York: Routledge.

#### Recommended

Grieco, Joseph M, 1988. "Anarchy and the Limits of Cooperation: A Realist Critique of the Newest Liberal Institutionalism." *International Organization* 42(3): 485-507.

Choucri, Nazli and Robert C. North. 1989. "Lateral Pressure Theory in International Relations: Concept and Theory." In Midlarsky, Manus I. ed. *Handbook of War Studies*. Boston: Unwin Hyman, pp. 289-326.

## (6) Dynamics of Tranformation and Change

October 21, 2013

## **Required**

Choucri, Nazli, Stuart Madnick and Jeremy Ferwerda. 2013. "Institutional Foundations for Cyber Security: Current Responses and New Challenges." *Information Technology for Development*, 2013. http://dx.doi.org/10.1080/026811022103836699

Latham, Robert, ed. 2003. *Bombs and Bandwidth: The Emerging Relationship Between Information Technology and Security*. New York: Social Science Research Council. Chapters 7, 11 and 12.

Choucri, Nazli. *Cyberpolitics in International Relations*. Cambridge, MA: MIT Press, Chapter 5.

Yochai Benkler, "WikiLeaks and the Protect---IP Act: A New Public---Private Threat to the Internet Commons," *Daedalus*, MIT Press, Fall 2011, p 154.

#### Recommended

Anderson, Ross and Tyler Moore, 2006, "The Economics of Information Security", *Science* 314 (October 2006): 610-613.

Borgatti, Stephen P., Ajay Mehra, Daniel J. Brass, and Giuseppe Labianca. 2009. "Network Analysis in the Social Sciences." *Science* 323 (February 13, 2009): 892---895.

Lessing, Lawrence. 2008. REMIX. New York: Penguin Books. Chapter 6.

## (7) Globalization and Cyber Security

## October 28, 2013

## Required

Madnick, Stuart, Xitong Li and Nazli Choucri. 2009. "Experiences and Challenges with Using CERT Data to Analyze International Cyber Security." *Working Paper CISL#2009-13*. September 2009. http://web.mit.edu/smadnick/www/wp/2009-13.pdf

Arzberger, Peter, Peter Schroeder, Anne Beaulieu, Geof Bowker, Kathleen Casey, Leif Laaksonen, David Moorman, Paul Uhlir, and Paul Wouters. 2004. "An International Framework to Promote Access to Data." *Science* 303 (March 2004): 1777-1778.

Sell, Susan K. 2013. "Revenge of the 'Nerds': Collective Action against International Property Maximalism in the Global Information Age." *International Studies Review* (2013) 15, 67-85.

Reidenberg, J.R., 2005. "Technology and internet jurisdiction." *University of Pennsylvania Law Review*, vol. 153, 1951.

#### Recommended

Levchenko, K., et. al. 2011. "Click Trajectories: End---to---End Analysis of the Spam Value Chain." *Proceedings of the IEEE Symposium on Security and Privacy*. Oakland, California. 431-446.

## (8) Cyber Conflicts – Cases, Contentions & Attacks

November 4, 2013

# **Required**

Dunne, Tim, Milja Kurki and Steve Smith eds. 2010. *International Relations Theories*. Oxford: Oxford University Press, Chapters 3, 4, 5, 6 and 9.

Choucri, Nazli, 2012. *Cyberpolitics in International Relations*. Cambridge, MA: MIT Press, Chapter 6.

Kugler, Richard L. "Deterrence of Cyber Attacks." 2008. In Kramer, Franklin D., Stuart H. Starr, and Larry K. Wentz, eds, 2009, *Cyberpower and National Security*. Washington, DC: NDU Press and Potomac Books, Inc.: 309 – 340.

Reidenberg, J.R. 2001. "The Yahoo Case and the International Democratization of the Internet." *SSRN eLibrary*, (April). Retrieved from http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=267148

## Recommended

Knake, Robert K., 2010. "Internet Governance in an Age of Cyber Insecurity." *Council on Foreign Relations*, Council Special Report No. 56, September.

Clark, David D., John Wroclawski, Karen R. Sollins, and Robert Braden. 2005. "Tussle in Cyberspace: Defining Tomorrow's Internet." *IEEE/ACM Transactions on Networking*, Volume 13, No. 3, June 2005.

## (9) Cyber Cooperation & International Institutions

November 18, 2013

## Required

Benkler, Y. 2001. "The battle over the institutional ecosystem in the digital environment." *Commun. ACM*, vol. 44, no. 2, 84-90.

David, Paul A. 2006. "Toward a Cyberinfrastructure for Enhanced Scientific Collaboration: Providing Its 'Soft' Foundation May Be the Hardest Part." In Kahin, Brian and Dominque Foray, eds, *Advancing Knowledge and the Knowledge Economy*, Cambridge, MA: MIT Press, 431-453.

Johnson, David R. and David G. Post. 1996. "Law and borders: The rise of law in cyberspace." *Stanford Law Review*, vol. 48 (May): 1367-1402.

Livnat, Adi, and Marcus W. Feldman. 2001. "The evolution of cooperation on the Internet", *Complexity*, 6 (July/August): 19---23.

Reidenberg, J.R. 2000. "Resolving conflicting international data privacy rules in cyberspace." *Stanford Law Review*. Vol. 52, no. 5. pp. 1315---1371.

## Recommended

Souter, David. "Louder Voices" and the International Debate on Developing Country Participation in ICT Decision---Making." 2008. Drake, W.J., and E. J. Wilson, eds., Governing Global Electronic Networks: International Perspectives on Policy and Power, The Information Revolution and Global Politics, Cambridge, MA: The MIT Press.

# (10) Evolving Global Agenda – WSIS & WCIT-2012

November 25, 2013

## Required

Choucri, Nazli, 2012. *Cyberpolitics in International Relations*. Cambridge, MA: MIT Press, Chapter 9.

Greenstein, Ran, and Anriette Esterhuysen. 2006. "The Right to Development in the Information Society." In Jørgensen, Rikke Frank, ed., *Human Rights in the Global Information Society*. Cambridge, MA: The MIT Press, Chapter 12.

Elmer, Greg "Exclusionary Rules? The Politics of Protocols." In Chadwick, Andrew and Philip N. Howard, eds. *The Routledge Handbook of Internet Politics*. New York: Routledge.

Cogburn, Derrick L. 2010. "Enabling effective multi-stakeholder participation in global internet governance through accessible cyber-infrastructure" in Chadwick, Andrew and Philip N. Howard, eds. *The Routledge Handbook of Internet Politics*. New York: Routledge.

#### Recommended

Wilson, Ernest J. "Conclusion: Governance of Global Electronic Networks." 2008. In Drake, W.J., and E. J. Wilson, eds., *Governing Global Electronic Networks: International Perspectives on Policy and Power, The Information Revolution and Global Politics*, Cambridge, MA: The MIT Press.

## (11) Private Order & Cyber Governance

December 2, 2013

## Required

Buthe, Tim and Walter Matti, 2011. *The New Global Rulers*. Princeton NJ: Princeton University Press. Chapters 2, 3 and 9.

Caral, J., 2004. "Lessons from ICANN: Is self---regulation of the Internet fundamentally flawed?" *International Journal of Law and Information Technology*. Vol. 12 (1). 1-31.

Hall, R.B. and T. J., Biersteker. 2003. "The Emergence of Private Authority in Global Governance." In Hall, R.B. and T. J., Biersteker (eds.), *The Emergence of Private Authority in Global Governance*. Cambridge University Press, Chapter 1.

Mueller, Milton, and Mawaki Chango. 2008. "Disrupting Global Governance: The Internet Whois Service, ICANN, and Privacy." *Journal of Information Technology and Politics* 5(3): 303---325.

Choucri, Nazli, 2012. *Cyberpolitics in International Relations*. Cambridge, MA: MIT Press, Chapter 8.

#### Recommended

Cassese, Antonio and Andrew Clapham. 2001. "International Law." In *The Oxford Companion to Politics of the World*, 2nd edition. Joel Krieger, ed. Oxford, UK: Oxford University Press, pp. 408 -411.

Powell, M. J., 1993, "Professional Innovation: Corporate Lawyers and Private Law---Making", Law & Social Inquiry 18: 423-452.

# (12) Alternative Futures in Cyberpolitics

December 9, 2013

## Required

Choucri, Nazli, 2012. *Cyberpolitics in International Relations*. Cambridge: MIT Press, Chapter 10.

Kohl, Uta, 2007. *Jurisdiction and the Internet: Regulatory Competence over Online Activity*. Cambridge: Cambridge University Press. Chapter 4 and 5.

Solum, Lawrence B., 2008. "Models of Internet Governance." *Public Law Research Paper No. 07---25 and Law & Economic Research Paper No. LE08---*027. September 3. Champaign, Illinois: University of Illinois.

Rogerson, Kenneth S. and Daniel Milton. 2010. "Internet diffusion and the digital divide: the role of policy-making and political institutions." In Chadwick, Andrew and Philip N. Howard, eds. *The Routledge Handbook of Internet Politics*. New York: Routledge.

## Recommended

Zittrain, Jonathan L. 2008. *The Future of the Internet – And How to Stop It*. New Haven: Yale University Press.

Zittrain, Jonathan L. 2005. *Jurisdiction. Internet Law Series*. Eagan, MN: Foundation Press.

Ostrom, Elinor, Joanna Burger, Christopher B. Field, Richard B. Norgaard, and David Policansky. 1999, "Revisiting the commons: local lessons, global challenges." *Science* 284 (April): 278-282.