

MICHIGAN STATE UNIVERSITY

Department of Media and Information

Course: Telecommunication (TC) 850

Media and Information Policy

Spring 2015 Prof. Bill Dutton Tuesdays, 6:00-8:50 pm, Communication Arts Bldg 155

Overview

This course will introduce a wide range of major issues, technologies and contexts central to media and information policy research, particularly concerning the Internet and related digital media, information and communication technologies. While the course will treat most topics at a general level, students will have an opportunity to pursue a topic of particular interest to them in more depth. In doing so, you will learn how to approach study of the political and social shaping of media and information policy and its implications for society. To accomplish this, students will also be introduced to interdisciplinary approaches to social and policy methods and analyses. Each class will discuss ways to apply concepts and data drawn from multiple disciplinary traditions to the topics at hand.

Course Description and Objectives

Media and information policy is at a critical period of development. Policy has generally lagged developments in media and information technologies, such as the Internet, but public and political pressures to do something about such hot button issues as online threats, and privacy, are moving policy makers and regulators to reach for solutions, often from earlier media, such as broadcasting. TC-850 focuses on political and other social and technical factors shaping media and information policy and its implications for technology and society. It also aims to give students a set of concepts and approaches to the study of media and information policy.

We will discuss research on policy from three angles, what might be called: enduring issues, such as freedom of expression and privacy; policy issues arising around emerging technologies, such as the Internet of Things; and issues tied to particular problems or objectives, such as urban development. Over the semester, students will also be introduced to various frameworks for understanding the factors shaping policy and its implications. The course will be equally concerned with the theoretical, empirical and other analytical approaches to research on policy, and whether they can be applied to specific policy questions in particular contexts. Policy research, it will be argued, is inherently interdisciplinary. Therefore, students will be expected to complete the course with an appreciation of the strengths and weaknesses of interdisciplinary studies of media and information policy in the digital age.

Normally, each session of the class will divide into three parts. Each class meeting will begin with a lecture by Bill Dutton, or a relevant guest lecturer. In the second part of the class, one or more students will report on a scholarly article, drawn from the week's recommended readings. The third part of each class will focus on discussion of developing policy issues and related research drawing on examples from the press, regulatory agencies, or the Web. They should be directly connected to the week's readings and brought to class by the students.

By the end of the semester, students will have been introduced to a broad policy area and issues, as well as relevant information and communication technologies (ICTs), contexts, theories, concepts and research methods. Each student should be able to describe and critique work on these objects of inquiry, and various theories and concepts, including their strengths and weaknesses. Also, students should develop the ability to speak and write about policy issues and translate academic theory and concepts into terms of more relevance to practitioner concerns and issues. Translating theory and research out of the language of academics and into simple but sophisticated non-technical terms for the practitioner community and lay public is a key aim of this course. Finally, students should be prepared to apply useful theories and concepts either to address emerging policy problems or advance scholarly research.

Required Texts

Given the varied interests of students, and the diversity of topics covered in the course, the required readings are kept to a minimum. This is designed to enable students to pursue particular topics of interest for the course, and being introduced to a wide array of technologies, policies, and issues. That said, all students are encouraged to acquire a copy of an overview of policy research that will help everyone develop their particular term paper for this course. I suggest you purchase:

Majchrzak, Ann, and Markus, M. Lynne, (2014), *Methods for Policy Research: Taking Socially Responsible Action*, Second Edition. Los Angeles, CA: Sage.

An alternative text would be:

Bardach, Eugene, (2012), *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*, Fourth Edition. Los Angeles, CA: Sage.

Another text that I will draw from in discussing methods is on case study research, which is often a strong approach to policy research, which is:

Yin, Robert K. (2014), *Case Study Research*, Fifth Edition. Los Angeles, CA: Sage.

Other Readings.

Weekly readings will be designated as required, which everyone should read, and further readings, which should be read as your time and interest permits. They are key resources for you to choose from in making a class presentation, and in developing your term paper. All readings should be available on the course site, at the Quello Center Library, or on the Web. If you have difficulty finding access to any reading, please contact Bill Dutton.

In addition, terms will be linked to each week for students to review through online 'desk' research prior to the class period. This will enable class time to focus on policy issues and questions and approaches to research, rather than more fundamental background material.

Other Sources at Quello Library:

Required readings are generally available in the Quello Center Library as are a number of key sources that will be of value to exploring particular topics and conducting research of relevance to your term paper. Students are encouraged to use the library, and to use the material in the library, so that it can be shared. Key resources available in the Quello Library include copies of *Communications Daily*, a prominent telecom news source, which presents detailed notes on FCC proceedings. Also, a four volume compilation of articles on politics and the Internet is available in the library, with many articles of relevance to topics covered in this course. See:

Dutton, W. H. with the assistance of Elizabeth Dubois (2014) (ed.), *Politics and the Internet*: Volumes I-IV. Abingdon, UK: Taylor & Francis Routledge.

Vol I. Politics in the Digital Age – Reshaping Access to Information and People Vol II. Campaigns and Elections

Vol III. Netizens, Networks and Political Movements

Vol IV. Networked Institutions and Governance

Course Requirements

The course requires students to cover the readings and lectures, grasp key issues in media and information policy, be able to present key concepts and issues in the field, and understand basic approaches to conducting research on media and information

policy. To assess these goals, there will be the following requirements:

1. Mid-Term: There will be a mid-term examination on February 24th, covering the readings, lectures, presentations, and discussion up to that point in the course.

2. Class Preparation. Prior to class, students should research key concepts, technologies and terms identified for each week's class. This can be done individually or in groups, but this preparation will enable us to free class time from covering material that is easily available online and in course readings.

3. Class Presentation. During the semester, each student will make two (2) 10-15 minute class presentations. The presentation should focus on an issue tied to subject of that week's class. You can focus on a 'further reading' assigned for the particular week in which the presentation is delivered, such as a chapter from a book, or a journal article or a government report, although the presenter can make the case for an alternative reading that is central to their interests and the subject.

4. Connecting the Course to Emerging Developments in Media and Information Policy: Each student should bring a news article, FCC or other regulatory action, a court decision, or other media and information policy development to class. Some time in each class will be devoted to discussing developments, and relating these to issues of the course, and to challenges for policy research.

5. Each student will write a 5,000 word final term paper, applying concepts and methods reviewed in this course to an issue or case study of media and information policy. Short (250-500 word) proposals for term paper topics, cases, and approaches should be emailed to Bill Dutton before the mid-term, and the final paper must be emailed to Bill Dutton (wdutton at msu.edu) no later than 5 pm on 5 May.

Weighting of Assessments for Semester Grade:

Mid-term exam **30**%

Two class presentations 30%

Regular class preparation, and participation $\mathbf{10}\%$

Term paper 30%

Plagiarism

Students should review the University's policy on plagiarism at: <u>https://www.msu.edu/unit/ombud/academic-integrity/plagiarism-policy.html</u> and ensure that all the work you present in this class is the product of your own effort.

Contact Information

Office Hours: Tuesday, 3pm – 5pm; or by appointment, The Quello Center, Com Arts and Sciences Building 406, Phone: (517) 432-8001 E-mail: wdutton at msu.edu

Course Outline & Reading Assignments

[DATE	TOPICS TO BE COVERED
	DATE	TOPICS TO BE COVERED
Intro	Jan 13	1. Policy Issues, Processes, and Interdisciplinary Research
Issues	Jan 20	2. Cyber Democracy: Empirical Findings and Policy Issues
	Jan 27	3. Access: Digital Divides, Inequalities, Literacy, ICT4D
	Feb 3	4. Freedom of Expression: Censorship, Filtering, Anonymity, and Related Issues and Actors in an Ecology of Policy Choices
	Feb 10	5. Privacy and Surveillance: Data Protection, Right to be Forgotten, Big Data, and Big Brother Post-Snowden
	Feb 17	6. Wake Up Call or Moral Panic? Threats, Sexting, Revenge Porn, Obscenity, Cyber-Bullying,
	Feb 24	Mid-Term Examination
	March 3	7. UNESCO Conference on Access, Freedom of Expression, Privacy and Ethics of the Internet (Live Stream)
Technologies	March 10	Spring Break
	March 17	8. The Future of Content Delivery and Ownership, and the Case of Net Neutrality
	March 24	9. Mobile, Wireless, and Spectrum Issues
	March 31	10. The Internet of Things
Goals, Objectives	April 7	11. Wired Cities, Responsive Cities, and ICT4Detroit
	April 14	12. Cyber Security and Cyber Crime
	April 21	13. Copyright and Protection of Intellectual Property
	April 28	14. Internet Governance: Balkanization, Privatization, and a Shift in National Internet Policy and Regulation
	May 5	Final Paper Due by 5pm
L	1	1

1. Policy Issues, Processes, and Interdisciplinary Research

In the first class session, I will walk students through the syllabus, including the topics and requirements for the course. I will then introduce the scope of this course, surveying key issues, aspects of the policy process, including the range of actors involved, and methods for policy research. All of these topics will be of a continuing focus of discussion throughout the semester and vital to the completion of student term papers.

Keywords: information policy, communication policy, media policy, information and communication technologies, policy, regulation, policy research

Required Readings

Majchrzak, Ann, and Markus, M. Lynne, (2014), *Methods for Policy Research: Taking Socially Responsible Action*, Second Edition. Los Angeles, CA: Sage.

An alternative text would be:

Bardach, Eugene, (2012), *A Practical Guide for Policy Analysis: The Eightfold Path to More Effective Problem Solving*, Fourth Edition. Los Angeles, CA: Sage.

Further Readings

Dutton, W.H. (1992). The Ecology of Games Shaping Telecommunications Policy. Communication Theory, 2(4): 303-328.

Mueller, M. L. (2010). Networks and States: The Global Politics of Internet Governance. Cambridge, MA: MIT Press.

Napoli, P. M. (2001), *Foundations of Communications Policy: Principles and Process in the Regulation of Electronic Media*. Cresskill, NJ: Hampton Press, pp. 11-28.

Owen, B. M., & Braeutigam, R. (1978). The regulation game: strategic use of the administrative process. Cambridge, MA: Ballinger.

Yin, Robert K. (2014), Case Study Research, Fifth Edition. Los Angeles, CA: Sage.

2. Cyber Democracy: Empirical Research and Policy Issues

A key issue in computing and telecommunications has long concerned the implications of technical change for democratic institutions and processes. New media including emerging ICTs around the Internet led to visions of technology reshaping democratic institutions and processes. Academic researchers raised issues over the good and bad of technologies designed to support democracy, the ideologies and belief systems underpinning them, and specific initiatives that illustrated the potential. This section introduces early conceptions tied to telecommunications and emerging perspectives, such as cyber democracy and my own work on the Fifth Estate.

Keywords: teledemocracy, e-democracy, cyberdemocracy, electronic service delivery, QUBE, electronic voting, e-petitions, e-consultation, wikigovernment

Required Readings

Coleman, S., and Blumler, J. G. (2014), 'The Wisdom of Which Crowd? On the Pathology of a Digital Democracy Initiative for a Listening Government', pp. 195-208 in Graham, M. and Dutton, W. H. (eds), *Society & the Internet*. Oxford, UK: Oxford University Press.

Dutton, W. H. (2012), 'The Fifth Estate: A New Governance Challenge', pp. 584-98 in Levi-Faur, D. (ed.), *The Oxford Handbook of Governance*. Oxford: Oxford University Press.

Further Readings

Agre, P. E., (2002), 'Real-Time Politics', Information Society, 18: 311-31.

Barber, B. R. (2001), 'The Uncertainty of Digital Politics: Democracy's Uneasy Relationship with Information Technology', Harvard International Review, 23, 42-48.

Becker, T. (1981), 'Teledemocracy: Bringing Back Power to the People', The Futurist (December): 6-9.

Coleman, S., and Blumler, J. G. (2009), The Internet and Democratic Citzenship: Theory, Practice and Policy. Cambridge, UK: Cambridge University Press.

Dutton, W. H. (1992), 'Political Science Research on Teledemocracy,' *Social Science Computer Review*, 10 (4), 505-22.

Dutton, W. H. with the assistance of Elizabeth Dubois (2014) (ed.), *Politics and the Internet*: Volumes I-IV. Abingdon, UK: Taylor & Francis Routledge.

Vol I. Politics in the Digital Age – Reshaping Access to Information and People Vol II. Campaigns and Elections

Vol III. Netizens, Networks and Political Movements

Vol IV. Networked Institutions and Governance

Howard, P. N. (2010), *The Digital Origins of Dictatorship and Democracy*. Oxford, UK: Oxford University Press.

Morozov, E. (2011), *The Net Delusion: How Not to Liberate the World*. London: Allen Lane.

Noam, E. (2002), 'Why the Internet is Bad for Democracy', Communications of the ACM, 48 (10): 57-58.

3. Access: Digital Divides, Inequalities, Universal Service, Literacy, ICT4D, Access to Information

Access to telecommunication services, broadcasting and the Internet and related information and communication technologies has been a key issue driving telecom policy and regulation. However, researchers have pointed out the many complexities of access that lead to inequalities, from skills, such as literacy, as well as the proximity of technical infrastructures, such as those related to urban-rural divides. Ironically, however, with the decline of fixed line phones in some nations, and rise of the Internet and mobile communication, the rational behind key policies, such as universal service, are being questioned. What access should be provided? Why? What are the barriers to achieving such policy and regulatory objectives?

Keywords: digital divide, media literacy, broadband, universal service, information and communication technologies for development (ICT4D), connecting America, and Connect America Fund, Freedom of Information Act

Required Reading

Bolsover, G., Dutton, W. H., Law, G., and Dutta, S. (2014), 'China and the New Internet World: A Comparative Perspective', pp. 117-134 in Graham, M. and Dutton, W. H. (eds), *Society & the Internet*. Oxford, UK: Oxford University Press.

TMTP (2014), Technology, Media, and Telecom Practice, McKinsey & Company, *Offline and Falling Behind: Barriers to Internet Adoption*. Available for download online.

Further Readings

Mendel, T. (2008), *Freedom of Information: A Comparative Legal Survey, 2nd Edition*. Paris, France: UNESCO.

Napoli, P. M. (2001), *Foundations of Communications Policy: Principles and Process in the Regulation of Electronic Media*. Cresskill, NJ: Hampton Press, pp. 177-201.

NTIA (2014), National Telecommunications and Information Administration, U.S. Department of Commerce, *Exploring the Digital Nation: Embracing the Mobile Internet*. Washington DC: NTIA.

Unwin, T. (2014), 'The Internet and Development: A Critical Perspective', pp 531-554 in Dutton, W. H. (ed), *The Oxford Handbook of Internet Studies*. Oxford, UK: Oxford University Press.

World Bank. (2009), *Information and Communications for Development: Extending Reach and Creating Impact*. Washington, DC: The World Bank.

4. Freedom of Expression: Internet Filtering, Anonymity, and Related Issues and Actors in a Global Ecology of Policy Choices

One of the most fundamental and enduring values behind regulation of the media and information is to support freedom of speech and the press – generally understood as freedom of expression. The diffusion of the Internet has supported freedom of

expression in many respects, but has also raised many issues, such as over Internet filtering. Moreover, this area demonstrates the need for policy research to avoid single issues, and look at the broader ecology of policy choices shaping particular outcomes, such as free expression.

Keywords: freedom of speech, press, expression; libel, slander, obscenity, hate speech, clear and present danger, censorship, Article 19 of Universal Declaration of Human Rights (1948), V-chip, Internet filtering

Required Reading

Deibert, R., Palfrey, J., Rohozinski, R. and Zittrain, J. (2010) (eds), *Access Controlled: The Shaping of Power, Rights, and Rule in Cyberspace*. Cambridge, Massachusetts: MIT Press.

Dutton, W. H. Dutton, Dopatka, A., Hills, M., Law, G., and Nash, V. (2011), *Freedom of Connection – Freedom of Expression: The Changing Legal and Regulatory Ecology Shaping the Internet*. Paris: UNESCO, Division for Freedom of Expression, Democracy and Peace. Reprinted in 2013; Trans. In French and Arabic.

Further Readings

Dutton, W. H., Law, G., Bolsover, G., and Dutta, S. (2013, released 2014) *The Internet Trust Bubble: Global Values, Beliefs and Practices*. NY: World Economic Forum. http://www3.weforum.org/docs/WEF_InternetTrustBubble_Report2_2014.pdf

Hogge, B. (2014), *A Guide to the Internet for Human Rights Defenders*. Brighton, UK: Barefoot Publishing Limited.

Levmore, S., and Nussbaum, M. C. (2010), *The Offensive Internet: Speech, Privacy, and Reputation*. Cambridge, MA: Harvard University Press.

Napoli, P. M. (2001), *Foundations of Communications Policy: Principles and Process in the Regulation of Electronic Media*. Cresskill, NJ: Hampton Press, pp. 29-62.

5. Privacy and Surveillance: Data Protection, Right to be Forgotten, Big Data, and Big Brother Post-Snowden

Concerns over privacy were instrumental to some of the earliest empirical studies of the societal implications of computing and telecommunications. In the post-Snowden era, this issue continues to be a dominant focus for policy and practice. Is technology inevitably undermining personal privacy, or can policy and regulation protect personal information online? What will be the nature of the policies and structures required to protect privacy in the digital age?

Keywords: privacy, privacy policy, uooojpersonal information, sensitive personal information, wire tap, meta data, surveillance, Edward Snowden, Wikileaks, whistleblowers, Electronic Communication Privacy Act 1986/1996, CALEA

Required Reading

Bennett, C. J., and Parsons, C. (2014), 'Privacy and Surveillance: The Multidisciplinary Literature on the Capture, Use, and Disclosure of Personal Information in Cyberspace', pp. 486-508 in Dutton, W. H. (ed), *The Oxford Handbook of Internet Studies*. Oxford, UK: Oxford University Press.

Froomkin, A. M. (2000), 'The Death of Privacy', *Stanford Law Review*, Vol. 52, No. 5, May: 1461-1543.

Millard, C. (2014), 'Data Privacy in the Clouds', pp. 333-347 in Graham, M. and Dutton, W. H. (eds), *Society & the Internet*. Oxford, UK: Oxford University Press.

Further Readings

Borgman, C. L. (2014), *Big Data, Little Data, No Data: Scholarship in a Networked World*. Cambridge, MA: MIT Press.

Dutton, W. (2010), 'Programming to Forget', a review of *Delete: The Virtue of Forgetting in the Digital Age* by Viktor Mayer-Schönberger in *Science*, Vol. 327, 19 March: 1456. <u>http://www.sciencemag.org/cgi/content/summary/327/5972/1456-a</u>

Rotenberg, M., and Jacobs, D. (2013), 'Updating the Law of Information Privacy: The New Framework of the European Union', *Harvard Journal of Law & Public Policy* (Spring), Vol. 36, Issue 2, pp. 605-652. Available at: http://www.harvard-jlpp.com/wp-content/uploads/2013/04/36_2_605_Rotenberg_Jacobs.pdf

Mayer-Schönberger, V. (2009, and 2011 edition), *Delete: The Virtue of Forgetting in the Digital Age*. Princeton, NJ: Princeton University Press.

Mayer-Schönberger, V., and Cukier, K. (2014), *Big Data*. London: John Murray.

6. Wake Up Call or Moral Panic? Threats, Sexting, Revenge Porn, Obscenity, Cyber-Bullying, ...

The Internet and related social media have raised many concerns around the protection of children and other vulnerable populations. Are these concerns a legitimate rational for greater or different regulations of media and information, or are they moral panics over new technologies? Can empirical research answer such questions, and thereby help shape policy and regulatory responses?

Keywords: sexting, online threats, cyber-bullying, moral panics, revenge porn, social media, gamergate

Required Reading

Krotoski, A. (2014), 'Inventing the Internet: Scapegoat, Sin Eater, and Trickster', pp. 23-35 in Graham, M. and Dutton, W. H. (eds), *Society & the Internet*. Oxford, UK: Oxford University Press.

Nakamura, L. (2014), 'Race and Gender Online', pp. 81-95 in Graham, M. and Dutton, W. H. (eds), *Society & the Internet*. Oxford, UK: Oxford University Press.

Further Readings

Lo, V-H., Wei, R., So, C. Y. K., and Zhang, G. (2013), 'The Influence of Third-Person Effects on Support for Restrictions of Internet Pornography among College Students in Shaghai and Hong Kong', pp. 191-204 in Lee, F. L. F., Leung, L., Linchuan Qiu, J., and Chu, D. S. C. (eds), *Frontiers in New Media Research*. New York: Routledge.

Strover, S. (2013), 'A Retrospective on Convergence, Moral Panic and the Internet', pp. 132-52 in Lee, F. L. F., Leung, L., Linchuan Qiu, J., and Chu, D. S. C. (eds), *Frontiers in New Media Research*. New York: Routledge.

Mid-Term Examination

7. UNESCO Conference on Access, Freedom of Expression, Privacy and Ethics

I will be attending a UNESCO Conference during this class period, but will plan to connect online or by phone for a short period of time. In addition, the conference will be live streamed, providing an opportunity for students to get online and listen in on this event, which concerns the key topics of this course. Information about how to connect with the event will be available in due course.

Keywords: UNESCO, McBride Report, NWIO

Spring Break

8. The Future of Content Delivery and Ownership, and the Case of Net Neutrality

Since the early days of the revolution in digital information technology, futurists and others have been forecasting the convergence of media and information technologies. In many ways, convergence has failed to keep pace with predictions, but nevertheless is raising new issues for policy and regulation, such as around network neutrality and regulation of broadcasting more generally.

Keywords: convergence, network neutrality, media ownership, media concentration, end-to-end principles, IPTV, OTT Content

Required Reading

Bauer, J. M., and Obar, J. A. (2014), 'Reconciling Political and Economic Goals in the Net Neutrality Debate', *The Information Society*, Vol. 30, No. 1, 1-19.

Napoli, P. M. (2001), Foundations of Communications Policy: Principles and Process

in the Regulation of Electronic Media. Cresskill, NJ: Hampton Press, pp. 125-76.

Noam, E. (2014), 'Next Generation Content for Next Generation Networks', pp. 319-332 in Graham, M. and Dutton, W. H. (eds), *Society & the Internet*. Oxford, UK: Oxford University Press.

JI, S. W., and Waterman, D. (2014), The Impact of the Internet on Media Industries: An Economic Perspective', pp. 149-63 in Graham, M. and Dutton, W. H. (eds), *Society* & *the Internet*. Oxford, UK: Oxford University Press.

Further Readings

Frieden, R. (2007), 'Network Neutrality or Bias? Handicapping the Odds for a Tiered and Branded Industry', *Hastings Communications Law Journal*, Vol. 29, No. 2, 171-216.

Gardam, T., and Levy, D. A. L. (2008) (eds), *The Price of Plurality: Choice, Diversity and Broadcasting Institutions in the Digital Age*. Oxford: The Reuter's Institute for the Study of Journalism.

McKnight, L. W. (2014), 'Over the Virtual Top: Digital Service Value Chain Disintermediation: Implications for Hybrid Hetnet Regulation', paper prepared for the 42nd TPRC Research Conference on Communication, Information and Internet Policy, George Mason University School of Law, Arlington, VA: September 12-14.

Marsden, C. T. (2010), *Net Neutrality: Towards a Co-Regulatory Solution*. New York: Bloomsbury USA.

Newman, N., Dutton, W. H., and Blank, G. (2014), 'Social Media and the News: Implications for the Press and Society', pp. 135-48, Graham, M. and Dutton, W. H. (eds), *Society & the Internet*. Oxford, UK: Oxford University Press.

Noam, E. (2009), *Media Ownership and Concentration in America*, New York: Oxford University Press.

Powell, A., and Cooper, A. (2011), 'Net Neutrality Discourses: Comparing Advocacy and Regulatory Arguments in the United States and the United Kingdom', *The Information Society*, 27: 311-25.

9. Mobile, Wireless, and Spectrum Issues

Mobile is among the more recent innovations in media and information that has shaped access to voice communications but also the Internet. Is this widespread global diffusion erasing digital divides, or creating new divides? Will wireless spectrum, critical to early mobile applications, be increasingly continuous, or will wired and hybrid networks make wireless more or less critical?

Keywords: wireless, mobile, mobile Internet, spectrum, unlicensed spectrum, WiFi, fiber to the home, fiber to the curb (pedestal)

Required Reading

Dutton, William H. and Law, Ginette and Groselj, Darja and Hangler, Frank and Vidan, Gili and Cheng, Lin and Lu, Xiaobin and Zhi, Hui and Zhao, Qiyong and Wang, Bin, Mobile Communication Today and Tomorrow (December 4, 2014). A Quello Policy Research Paper, Quello Center, Michigan State University.. Available at SSRN: http://srn.com/abstract=2534236 or http://dx.doi.org/10.2139/ssrn.2534236

Further Readings

Cave, M., Doyle, C., and Webb, W. (2007), Essentials of Modern Spectrum Management. Cambridge, UK: Cambridge University Press.

NTIA (2014), National Telecommunications and Information Administration, U.S. Department of Commerce, *Exploring the Digital Nation: Embracing the Mobile Internet*. Washington DC: NTIA.

10. The Internet of Things

Most research and discussion of the Internet has focused on connecting billions of people. Increasingly, discussion is shifting to connecting many more billions of 'things', from mobiles to refrigerators to the Internet. What is this innovation about, and what issues does it raise for policy and regulation?

Kewords: remote monitoring, remote patient monitoring, sensors, sensor networks, the Internet of Things (IOT), smart cities

Required Reading

Dutton, W. H. (2014), 'Putting Things to Work: Social and Policy Challenges for the Internet of Things', *Info*, Vol. 16 Iss: 3, pp. 1-21.

Further Readings

Carr, N. (2014), The Glass Cage: Automation and Us. New York, NY: W. W. Norton.

11. Wired Cities, Responsive Cities, and ICT4Detroit

Some of the earliest studies of the social implications of computing focused on urban governance, and what were called 'urban information systems'. Innovations in cable and interactive media, led to enthusiastic promotion of wired cities since the 1960s. Today, innovations in big data and computational analytics seem to be reviving

interest in the application of media and information to urban development.¹ Is this hype, or a real development that could improve the lot of cities and urban areas like Detroit?

Keywords: wired cities, big data, computational analytics, decline of Detroit, collaborative networks, distributed intelligence, urban information systems

Required Reading

Dutton, W. H., and Shapiro, M. (2014), 'Collaborative Networks in Detroit: The Internet in the City's Social and Economic Development', Quello Center Working Paper, East Lansing, MI: Quello Center, MSU.

Goldsmith, S., Crawford, S. (2014), *The Responsive City: Engaging Communities Through Data-Smart Governance*. New York: John Wiley & Sons.

Further Readings

Dutton, W. H., Blumler, J. G., and Kraemer, K. L. (1987), 'Continuity and Change in Conceptions of the Wired City,' in Dutton, W. H., Blumler, J. G., and Kraemer, K. L. (eds.), *Wired Cities: Shaping the Future of Communications*, Boston: G. K. Hall, 1987, 3-26.

12. Cyber Security and Cyber Crime

Computer security is not a new issue, but it is rising rapidly across the globe as a potential risk to a digital information-oriented society. There are efforts to enhance the cyber security capacity of individuals, organizations, and governments in the face of increasingly dramatic data and security breaches. What can be done through policy and regulation and by governments and regulators to enhance cyber security? One clear theme is that cyber security depends on a multitude of actors, making it critical that organizations and governments do not simply rely on cyber security experts, but also enroll all relevant actors in protecting their security, which requires systems that real users and businesses can effectively protect.

Keywords: information security, data breaches, spam, hacking, phishing, identity theft, (distributed) denial of service attack ((D)DOS), malware, pharming, encryption, Privacy Enhancing Technologies, Public Protection Technologies, CERT, notice and consent, NIIPA of 1996

Required Reading

Review the Website of the Global Cyber Security Capacity Center at: <u>http://www.oxfordmartin.ox.ac.uk/cybersecurity/</u>

Sommer, P., and Brown, I. (2011), 'Reducing Systemic Cybersecurity Risk',

¹ See a recent article in *Technology Review*. <u>http://www.technologyreview.com/news/532466/cities-find-rewards-in-cheap-technologies/</u>

Organization for Economic Cooperation and Development, Working Paper No. IFP/WKP/FGS(2011)3, January 14: http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1743384

Further Readings

Clark, D., Berson, T., and Lin, H. S. (2014) (eds), *At the Nexus of Cybersecurity and Public Policy: Some Basic Concepts and Issues*. Washington DC: National Research Council.

Coleman, G. (2014), *Hacker, Hoaxer, Whistleblower, Spy: The Many Faces of* Anonymous. New York: Verso.

Dutton, W. H. (2014), 'Fostering a Cybersecurity Mindset', A Quello and Cyber Security Capacity Center Working Paper, (September 1). Available at SSRN: http://ssrn.com/abstract=2490010 or http://dx.doi.org/10.2139/ssrn.2490010

Krebs, B. (2014), Spam Nation. Naperville, IL: Sourcebooks.

13. Copyright and Protection of Intellectual Property

Another rising issue of media and information policy and regulation is the protection of intellectual property, and whether or not it is possible and desirable to maintain strict control over copyright in a digital age. Like other issues, such as security and privacy, this involves global approaches and coordination to do 'what'?

Keywords: copyright, Intellectual Property,

Required Reading

David, M. (2014), 'Cultural, Legal, Technical, Economic Perspectives on Copyright Online: The Case of the Music Industry', pp. 464-485 in Dutton, W. H. (ed), The Oxford Handbook of Internet Studies. Oxford, UK: Oxford University Press.

Lessig, L. (2000), Code is Law, Harvard Magazine. http://harvardmagazine.com/2000/01/code-is-law-html

Mayer-Schönberger, V. (2008), 'Demystifying Lessig', *Wisconsin Law Review*, available at: http://hosted.law.wisc.edu/lawreview/issues/2008_4/mayer-schoenberger_-_final.pdf

Further Readings

Doctorow, C. (2014), *Information Doesn't Want to be Free: Laws for the Internet Age*. San Francisco, CA: McSweeney's.

Fisher, William W. III (2004), *Promises to Keep: Technology, Law, and the Future of Entertainment*. Stanford, CA: Stanford Law and Politics.

Ford, G. S. (2009), 'Whoops! Berkman Study Shows "Open Access" Reduces Broadband Consumption', Phoenix Center Perspectives, Phoenix Center for Advanced Legal & Economic Public Policy Studies, 09-05, 12 November.

Lanier, J. (2013), Who Owns the Future? London: Penguin Books.

Lessig, L. (2000), Code, and Other Laws of Cyberspace. New York: Basic Books.

Lessig, L. (2001), *The Future of Ideas: The Fate of the Commons in a Connected World*. New York: Random House.

Levine, R. (2011), *Free Ride: How Digital Parasites Are Destroying the Culture Business and How the Culture Business Can Fight Back.* New York: Doubleday.

Vogel, H. L. (2010), *Entertainment industry economics*, Cambridge, Cambridge University Press.

Xalabarder, R. (2002), 'Copyright: Choice of Law and Jurisdiction in the Digital Age', *Annual Survey of International and Comparative Law*, Golden Gate University School of Law, Vol. 8, Spring: 79-96.

14. Internet Governance: Balkanization, Privatization, and a Shift in National Internet Policy and Regulation

Global discussion and debate over whether and how to govern the Internet is becoming a major issue in media and information policy. Should nations take on a more active role in regulating the Internet? Perhaps the most critical issue is: What models exist for such regulation, given the degree that the Internet differs from traditional media and information technologies? Will failures to develop appropriate global governance mechanisms jeopardize the future of the Internet?

Required Reading

DeNardis, L. (2014), 'The Social Media Challenge to Internet Governance', pp. 348-359.

DeNardis, L. (2014), 'The Emerging Field of Internet Governance', pp. 555-575 in Dutton, W. H. (ed), *The Oxford Handbook of Internet Studies*. Oxford, UK: Oxford University Press.

Further Readings

Brown, I. (Ed.). (2013). *Research Handbook on Governance of the Internet*. Cheltenham, UK: Edward Elgar.

DeNardis, L. (2014), *The Global War for Internet Governance*. New Haven, CN: Yale University Press.

De Sola Pool, I. (1984), *Technologies of Freedom*. Cambridge, MA: Belkap Press.

Mueller, M. L. (2002), *Ruling the Root: Internet Governance and the Taming of* Cyberspace. Cambridge, MA: MIT Press.

Mueller, M. L. (2010), Networks and States: The Global Politics of Internet Governance. Cambridge, MA: MIT Press.

Final Paper Due by 5pm