# Syllabus (ver. 2.0)

# PUBP 8803 / PUBP4803

# "Internet and Public Policy"

# Mondays, 3-6 PM, D.M. Smith 208

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Office Hours: Wed. 3-5 PM and by appointment

# **Description**

This class examines characteristics of Internet technology that render it unique in the public policy arena. Topic areas include:

- **Technology**: Many policy issues are affected by such technical features as packet switching, routing, the domain name system (DNS), the Internet Protocol (IP), and peer-to-peer architectures. We will relate the technology to various policy issues.
- Institutions: Institutions have arisen that perform such functions as standards-setting, management, and policy-making. We will study the patterns of interests and influence of the Internet Engineering Task Force (IETF), the Internet Society (ISOC), and the Internet Corporation for Assigned Names and Numbers (ICANN).
- **Governance**: The Internet's "spaceless" nature is one of its most significant characteristics. It makes all policy global and raises questions of governmental authority beyond territorial borders. We will examine issues of jurisdiction and global governance.
- **Public Policies**: These include: anonymity, intellectual property, privacy, speech regulation, security, and surveillance. We will examine how these are shaped by underlying parameters of technology, institutions, and geography.

#### **Students**

Enrollment in the class is open. While primarily intended for MS and PhD students studying public policy, the class is open to any graduate student at Georgia Tech. Advanced undergraduates may participate with permission of the instructor. Although we will touch on technical topics, no special technical expertise is required or expected.

# **Texts for Purchase**

Much material will be available on the Internet. Six books should be purchased:

- Janet Abbate, *Inventing the Internet* (MIT Press, 1999)
- Lawrence Lessig, *Code* (2000)
- Lawrence Lessig, *The Future of Ideas* (2002)
- Jessica Litman, *Digital Copyright* (Prometheus Books, 2001)
- Milton Mueller, *Ruling the Root* (2002)
- Andy Oram, ed., *Peer-to-Peer* (O'Reilly, 2001)

## **Discussion List**

We will use an Email-based discussion group: http://groups.yahoo.com/group/PUBP88033-Spr03 To subscribe, send any message to: PUBP8803-Spr03-subscribe@yahoogroups.com

# Assignments (and percent of grade)

- 1. Active participation in discussion (10%)
- 2. Mid-term paper (25%)
- 3. In-class presentation (25%)
- 4. Final paper (40%)

## READINGS

#### WEEK 1 -- Introduction

• Introduction and review of syllabus

# WEEK 2 -- History, Technology, Institutions (1)

• Abbate, *Inventing the Internet* (Chaps. 1-4).

# WEEK 3 -Martin Luther King Day (observed)

No class

# WEEK 4 -- History, Technology, Institutions (2)

- Abbate, *Inventing the Internet* (to the end.)
- "A Brief History of the Internet by those who made the history, including Barry M.
  Leiner, Vinton G. Cerf, David D. Clark, Robert E. Kahn, Leonard Kleinrock, Daniel
  C. Lynch, Jon Postel, Lawrence G. Roberts, Stephen Wolff."
  <a href="http://www.isoc.org/internet/history/">http://www.isoc.org/internet/history/</a>
- Cerf, Vinton, "History of the IAB"

#### WEEK 5 -- Protocols and Standards

- "FAO: What is Usenet?" at http://www.fags.org/fags/usenet/what-is/part1/
- Internet Member Briefings Nos. 1, 3, 4, 6, 9 <a href="http://www.isoc.org/briefings/">http://www.isoc.org/briefings/</a>
  - Ipv6:
    - No. 1: "Ipv6 and the Future of the Internet"
    - No. 4: "Ipv6 Implementation"
    - No. 6: "The Transition to Ipv6"
  - Routing
    - No. 3: "Scaling the Internet's Routing System"
  - Instant messaging:
    - No. 9: "Instant Messaging and Presence on the Internet"
- Marjory Blumenthal and David Clark, "Rethinking the Design of the Internet: The End to End Arguments vs. the Brave New World," ACM Transactions on Internet Technology, Vol. 1, No. 1, August 2001, pp. 70-109. Available at http://www.ana.lcs.mit.edu/anaweb/PDF/Rethinking 2001.pdf
- J.H. Saltzer, D.P. Reed, David Clark, "End-to-End Arguments in System Design,"
   ACM Transactions in Computer Systems 2, 4, November 1984, pp. 277-288.
   http://web.mit.edu/Saltzer/www/publications/endtoend/endtoend.pdf
- Sabine Helmers, Ute Hoffmann, Jeanette Hofmann, "Standard Development as Techno-social Ordering: The Case of the Next Generation of the Internet Protocol" (5/96) <a href="http://duplox.wz-berlin.de/docs/ipng/">http://duplox.wz-berlin.de/docs/ipng/</a>
- Kesan and Shaw, "Fool Us Once Shame On You Fool Us Twice Shame On Us: What We Can Learn From the Privatizations of the Internet Backbone Network and the Domain Name System" (http://papers.ssrn.com/sol3/papers.cfm?abstract\_id=260834)

### WEEK 6 -- Global Governance and ICANN

- Mueller, Ruling the Root(2001)
- Klein, "Creating the Illusion of Legitimacy" (Cyber-Federalist No. 14), http://www.cpsr.org/internetdemocracy/cyber-fed/Number\_14.html
- "Putting It In Its Place -- Special Report: Geography and the Net," *The Economist*, 11 August 2001.

# WEEK 7 -- Code as Law (1)

• Lessig, Lawrence, *Code* (1999), Part 1 (chaps. 1-8)

## WEEK 8 -- Code as Law (2)

• Lessig, *Code*, chaps. 13-17 and appendix.

# WEEK 9 – Spring Break

No class

## WEEK 10 - Peer-to-Peer

- Oram, Andy, ed., Peer-to-Peer, Chaps. 1-6, 8-9
- Peter Biddle, Paul England, Marcus Peinado, and Bryan Willman, "The Darknet and the Future of Content Distribution" at http://crypto.stanford.edu/DRM2002/darknet5.doc

## **WEEK 12 -- Intellectual Property (1)**

• Litman, Digital Copyright (2001)

# WEEK 13 -- Intellectual Property (2)

• Lessig, Lawrence, The Future of Ideas

# **WEEK 14 -- Security**

- Bishop, Matt. 2003. "What is Computer Security?" *IEEE Security and Privacy*, January/February, 67-69.
- Gezelter, R. (1995). "Security on the Internet." In A. E. Hutt, Seymour Bosworth, and Douglas B. Hoyt (Ed.), Computer Security Handbook (3rd ed., pp. 23.21-23.25). New York: John Wiley & Sons, Inc.
- Warren, M., and William Hutchinson. (2001). Cyber Terrorism and the Contemporary Corporation. In G. Dhillon (Ed.), Information Security Management: Global Challenges in the New Millennium (pp. 53-64). Hershey, PA: Idea Group Publishing.
- Gordon, Loeb, and Sohali,. 2003. "A Framework for Using Insurance for Cyber-Risk Management." *Communications of the ACM.* March.
- Froomkin, Michael. 1999. "Legal Issues in Anonymity and Pseudonymity."
   The Information Society, 15:113-127

## **WEEK 15 – Civil Liberties**

• Visiting Speaker: Former Congressman Bob Barr

### WEEK 16 -- Content

- Rose, Frank. 1997. "Sex Sells: Young, Ambitious Seth Warshavsky is the Bob Guccione of the 1990s." Wired, December. http://www.wired.com/wired/5.12/sex pr.html
- Bilstad, Blake. 1996. "Obscenity and Indecency in a Digital Age: The Legal and Political Implications of Cybersmut, Virtual Pornography, and the Communications Decency Act of 1996," Computer and High Technology Law Journal, Vol. 13, pp. 321-384.
- Nesson, Charles, and Marglin, David. 1996. "The Day the Internet Met the First Amendment: Time and Communications Decency Act," *Harvard Journal of Law & Technology*, 10:1, Fall, pp. 113-135.

#### WEEK 17 -- Privacy

- Davies, Simon. 1997. "Re-Engineering the Right to Privacy: How Privacy Has Been Transformed from a Right to a Commodity," in Agre, Phil, Rotenberg, Marc, eds., *Technology and Privacy* (MIT Press), pp. 143-165.
- Akdeniz, Yaman. 2000. "New Privacy Concerns: ISPs, Crim Prevention and Consumers' Rights." *International Review of Law, Computers & Technology*, 14:1, 55-61.

- Schwartz, Paul. 1995. "Privacy and Participation: Personal Information and Public Sector Regulation in the United States." *Iowa Law Review*. Pp. 553-618.
- Schwartz, Paul. 1995. "European Data Protection Law and Restrictions on International Data Flows" *Iowa Law Review*. Pp. 471-496.