The Global Information Economy: Issues and Analysis
A Course Proposal for Undergraduate World Studies Juniors and Seniors
Tuesdays and Thursdays, 12:30-1:45PM
Temple 1101

Instructor
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Course Description

The Internet is a shared technical platform of *virtually* global proportions that enables users to interact with digital services and content, with the logic of this interaction mediated and governed by the Internet Protocols. Increasingly, expanding and improving access to the Internet and increasing the range and value of online services and content are matters of significant public interest, if not public policy. Frequently, these issues are also the subject of great public controversy, from the mid-1990s global debate about international charging arrangements for Internet services (ICAIS), to the current concerns about Internet governance and the "Digital Divide."

This course will build on students' basic understanding of Internet services and technologies to foster a critical engagement with some of the current policy issues that could substantially impact this vital global resource. Directed readings, guest speakers, and online exercises will introduce these issues and help students to better understand how government entities, commercial enterprises, and extra-national organizations define and assert their interests in the loosely defined Internet policy sphere.

Objectives

Students will learn how national and global Internet development is shaped by the interaction of protocol-governed processes, commercial arrangements, technical standard setting, and regulatory power. Current and historical issues in Internet policy development will scrutinized for evidence of some of the broad structural drivers of Internet growth and evolution. Students will also be introduced to some publicly available protocol-based Internet metrics, and learn to use this data to interpret arguments over contentious international Internet policy issues.

Prerequisites

Basic understanding of Internet technologies (i.e., not just applications like email and the web), such as might be achieved by assimilating the relevant portions of the Howstuffworks website:

http://computer.howstuffworks.com/internet-infrastructure.htm

or better yet by reading a book like *How the Internet Works, Seventh Edition* (Gralla, 2003).

Participation and Assessment

Three non-cumulative tests will be given, one at the end of each course section. These tests will emphasize understanding rather than mere factual repetition, so consistent attendance and active class participation is encouraged. A short (5-7 page) policy analysis/recommendation paper will also be required; first drafts are due at the beginning of class on March 22. Alternately, if there is sufficient class enrollment, we may conduct a semester-length simulation of the global interaction between regulators, phone companies, ISPs, and private investors – in which case the final paper will be devoted to summarizing student experiences and outcomes in the simulation. Each assignment will be worth 25% of the final grade.

Required Texts

Janet Abbate, *Inventing the Internet* (MIT Press, 2000).

Manuel Castells, *The Internet Galaxy* (Oxford University Press, 2001).

Lawrence Lessig, *Code and Other Laws of Cyberspace* (Basic Books, 1999).

Milton Mueller, *Ruling the Root: Internet Governance and the Taming of Cyberspace* (MIT Press, 2002).

Optional Texts

Preston Gralla, *How the Internet Works, Seventh Edition* (Que Publishing, 2004).

Mark A. Sportak, *IP Addressing Fundamentals* (Cisco Press, 2003).

All of the above should be available at the University Bookstore. Other texts will be provided online by the instructor or made available through local copying services.

Section I (five weeks): Foundations

Week 1: Housekeeping, introductions, "architecture" as a regulating principle
Week 2: Introduction to Internet Protocols: IPv4 and DNS
Week 3: Bellheads vs. Netheads: Telecom and the Internet
Week 4: Internet Origins and Diffusion; take-home test on February 17
Week 5: US-Japan international network analysis practicum (online; no class sessions)

Section II (Four Weeks): Issues

Week 5: Internet Governance Institutions: IANA, ICANN, IETF, ISOC (Alternate: Introduction to the Global Information Economy Simulation)
Week 6: Perspectives On The Digital Divide: Cost vs. Control
Week 7: The DNS Country-Code Top Level Domain (ccTLD) Controversy
Week 8: International Charging Arrangements for Internet Services (ICAIS)
Week 9: WSIS: Internet Governance Reform Proposals; in-class test on March 31

Section III (Four Weeks): Interventions

Week 10: Technology Changes: Broadband, Wireless, IPv6, New TLDs
Week 11: Economic Changes: Metered Access, Subsidized Service, Paid Content
Week 12: Policy Changes: Layer-Based Regulation, New Institutions
Week 13: Challenges: Security, Identity, Mobility, et al.
Week 14: Wrap-up, course, surveys, housekeeping (Alternate: review Of The Global Information Economy simulation).
Week 15: Final in-class test

Detailed Schedule

Detailed reading requirements, test dates, and assignment requirements will be posted in the WoN class directory on January 18. Supplemental course materials will be posted here on a rolling basis, so visit frequently.