

Residential College IDiv 330
Prof. Paul N. Edwards
University of Michigan, Winter 2003
MW 12:30–2:30
224 Tyler, Residential College
Wolverine Access course number: 28083

Information Technology and Global Politics

What do the Cold War, the World Wide Web, multinational corporations, and global warming have in common? All are part of the globalization of power and knowledge, one of the major forces shaping the modern world. But equally important, without computers and other new information technologies, none would exist as we know them. This course examines information technology as the infrastructure of global politics and explores its influence on particular global political problems and institutions.

In Winter 2003, we will cover four major topics: terrorism, counter-terrorism, war, and military technology; the Internet and other global networks; corporate power; and human culture. In each case, we will try to trace the historical and contemporary forces responsible for the use of information technology to unify or link formerly local and regional phenomena into new, worldwide systems and meta-systems. Emerging issues about political power, social equity, and science-technology-society relations will be our dominant themes of discussion.

This course counts as an elective toward the new Academic Minor in Science, Technology & Society (<http://www.umich.edu/~umsts>).

Prerequisites: sophomore standing. Familiarity with basic computer concepts is helpful, but not assumed.

Requirements:

- (1) **Reading outlines and class participation** (20 percent of grade). Before each class meeting, except when some other assignment is due, you will prepare a short outline of the class readings for that session. Reading outlines are due on the Coursetools website by 10:00 AM on the day of each class session. You must turn in at least 13 outlines in order to pass the course. You also must participate fully in class discussions, giving evidence of your preparation for that day's meeting. Since the purpose of the reading outlines is to prepare you for class discussions, late outlines will not be accepted.

- (2) **Two mini-presentations** on a subject related to the week's reading (each 7.5 percent of grade). Twice during the semester, you will decide (with a partner) on a topic related to one week's reading, conduct some quick-and-dirty research, and make a short (10–15 minute) presentation to the class on what you learned.
- (3) **Midterm exam** (20 percent of grade). This will be an in-class, open-book exam covering all course readings through February 17th. It will consist of identifications, short answers, and essay questions. Wednesday, February 19th.
- (4) **Group project** on cyber terrorism and counter-terrorism (15 percent of grade). In groups of two to four, you will investigate a topic related to information warfare, cyber terrorism, hacktivism, and/or counter-terrorism. Presentations must include a substantial set of visual aids, such as Powerpoint or overhead slides. In class on Monday, March 26th and Wednesday, March 31st.
- (5) **Final research project** (3000–4000 words, 30 percent of grade). This can be a traditional paper 3000–4000 words in length, or the equivalent amount of work in another medium: hypermedia, video, fiction, or other creative endeavor. All projects must involve a very substantial, fully referenced research component. In all cases, the assignment has three parts.
 - (a) A 300-word *prospectus*, clearly describing your topic and listing sources, is due on Monday, February 10th.
 - (b) A *full-length, high-quality draft* is due Wednesday, March 12th. It will be returned within a week, with comments and suggestions for revisions. This is a serious deadline subject to the extension policy described below.
 - (c) The *final version*, edited, revised, and proofread, is due at the final class session on Wednesday, April 16th. **NO LATE PROJECTS.**

NB: A passing grade in **all** of the above components is required to pass the class.

Class attendance is required. You can miss up to 3 class sessions during the semester without penalty. After that, **each** missed class will result in a one-third letter grade reduction in your final course grade. For example, if your grade should be a B+ but you missed a total of six classes during the semester, you would receive a C+ instead, or the equivalent mention on your narrative evaluation.

Extension policy: NO EXTENSIONS will be granted. NO LATE PAPERS.

Required Texts:

Arquilla, John, and David F. Ronfeldt. *Networks and Netwars: The Future of Terror, Crime, and Militancy*. Santa Monica, CA: Rand Corporation, 2001.

Castells, Manuel. *The Internet Galaxy: Reflections on the Internet, Business, and Society*. New York: Oxford University Press, 2001.

Gunaratna, Rohan. *Inside Al Qaeda: Global Network of Terror*. New York: Columbia University Press, 2002.

Held, David, Anthony McGrew, David Goldblatt, and Jonathan Perraton, *Global Transformations: Politics, Economics and Culture* (Stanford, CA: Stanford University Press, 1999).

Johnson, Chalmers A. *Blowback: The Costs and Consequences of American Empire*, New York: Metropolitan Books, 2000.

Rochlin, Gene. *Trapped in the Net: The Unanticipated Consequences of Computerization* (Princeton, NJ: Princeton University Press, 1997).

Articles, available at Coursetools website (URL to be announced)

All course books are on 2-hr. reserve at the undergraduate library.

Course website:

The course website is a vital part of this class. It contains the course schedule, the syllabus, all assignments, all readings other than books, and URLs for useful research resources. There is also a discussion board for use by the class. Please check the site frequently for announcements.

All assignments, including reading outlines, must be submitted on Coursetools when they are due.

Instructor:

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Office hours: at 104 Tyler — Wednesdays 2:35-3:30, 301D West Hall: Tuesdays 4:15-5:00, Wednesday, or by appointment

Course Schedule

- Readings marked (C) are available on the Coursetools website. I strongly recommend that you print these out and collect them in a notebook, so that

you can mark them up. You will also want to have your own copies for the open-book midterm exam.

Part I: Overview

Monday 1/6 — **Introduction: What is Information? What is Technology?**

— *Guidelines for reading outlines distributed. Outlines are due for ALL subsequent class sessions, except when some other assignment is due.* —

Wednesday 1/8 — **What is Globalization?**

Reading: Held et al., *Global Transformations*, Introduction (pp. 1–31)

Monday 1/13 — **What is Politics? Nation–States and Global Institutions**

Reading: Held et al., *Global Transformations*, Chapter 1 (pp.33–86)

Part I: Information Technology and the Cold War

Wednesday 1/15 — **War and/as Globalization**

Reading: Held et al., *Global Transformations*, Chapter 2 (pp. 87–147)

Monday 1/20 — **NO CLASS - MLK Day**

Wednesday 1/22 — **Computers and the Early Cold War**

Reading: Edwards, *The Closed World*, Chapter 1 (pp. 1–15 only) and Chapter 3 (C)

Recommended: Edwards, *The Closed World*, Chapter 2 (C)

Monday 1/27— **Computers, Nuclear C³I, and Cold War Dynamics**

Reading: Edwards, *The Closed World*, Chapter 9 (C)
Rochlin, Chapter 8

Wednesday 1/29 — **Blowback: The United States as an Imperial Power**

Reading: Johnson, *Blowback*, Prologue and Chapters 1, 4–5, 8

Part II: Global Corporations and Power in the Information Age

Monday 2/3 — **Origins of the Internet and WWW**

Reading: Castells, *The Internet Galaxy*, "Opening" and Chapters 1–2

Rochlin, *Trapped in the Net*, Chapter 3

Wednesday 2/5 — **Global Trade and Global Markets**

Reading: Held et al., *Global Transformations*, Chapter 3 (pp. 149–187)

Monday 2/10 — **Global Financial Markets**

Reading: Rochlin, *Trapped in the Net*, Chapters 5–6
Johnson, *Blowback*, Chapter 9

Skim: Held et al., *Global Transformations*, Chapter 4 (pp. 189–234). This is a difficult chapter that requires considerable background knowledge about financial markets; please study the tables, charts, and figures, and skim the text.

— *Prospectus for final paper due in class* —

Wednesday 2/12 — **Corporate Power**

Reading: Held et al., *Global Transformations*, Chapter 5 (pp. 236–282)

Monday 2/17 — **The Internet and the Global Economy**

Reading: Castells, *The Internet Galaxy*, Chapter 3
Gereffi, "Shifting Governance Structures in Global Commodity Chains, With Special Reference to the Internet" (C)

Wednesday 2/19 — **Midterm exam (in class)** - covers all material through February 17

Part III: IT & War, Terrorism, and Counter-Terrorism

Monday 3/3 — **IT and War: Lessons from History**

Reading: Van Creveld, "The Helicopter and the Computer" (C)
Rochlin, Chapters 10–11

Wednesday 3/5 — **IT and the Future of War**

Reading: Arquilla and Ronfeldt, "Cyberwar is Coming!" (C)
Berkowitz, "Warfare in the Information Age" (C)
Libicki, "The Small and the Many" (C)

Monday 3/10 — **Violent Netwars**

Reading: Johnson, *Blowback*, Chapter 10
Arquilla and Ronfeldt, *Networks and Netwars*, Chapters 2–3

Wednesday 3/12 — **Al Qaeda (I)**

Reading: Powers, "Secrets of September 11" (C)
Gunaratna, *Inside Al Qaeda*, Chapters 1 and 2

Recommended: Gunaratna, *Inside Al Qaeda*, Introduction

— *First draft of final paper due in class* —

Film: The Prize, episode 7

Monday 3/17 — **Al Qaeda (II)**

Reading: Gunaratna, *Inside Al Qaeda*, Chapters 3 and 5

Recommended: Gunaratna, *Inside Al Qaeda*, Chapter 4

Wednesday 3/19 — **Information Warfare and International Law**

Reading: Fast, "Knowledge Strategies: Balancing Ends, Ways, and Means in the Information Age" (C)

Joyner and Lotrionte, "Information Warfare as International Coercion: Elements of a Legal Framework" (C)

Strongly recommended: Froomkin, "The Internet as a Source of Regulatory Arbitrage" (C)

Monday 3/24 — **Cyber Terrorism and Counter-terrorism**

Reading: Denning, "Is Cyber Terror Next?"

Ham and Atkinson, "Using Technology to Prevent and Defeat Terrorism"

Wednesday 3/26 — **IT, Terrorism, and Counter-terrorism**

— *Group project presentations* —

Monday 3/31 — **IT, Terrorism, and Counter-terrorism**

— *Group project presentations* —

Part IV: IT, Culture, and Politics

Wednesday 4/2 — **Global Culture(s) and New ICTs**

Reading: Held et al., *Global Transformations*, Chapter 7 (pp. 327–374)

Monday 4/7 — **Digital Divides and Global Connections**

Reading: Castells, *The Internet Galaxy*, Chapters 8–9

Schott, "Global Webs of Knowledge" (C)

Wednesday 4/9 — **Social Netwars**

Reading: Arquilla and Ronfeldt, Chapters 5–7

Film: A Mobile World

Monday 4/14 — **Activism and the Internet**

Reading: Arquilla and Ronfeldt, Chapters 8–10

Wednesday 4/16 — **Conclusion**

— *No reading* —

— *Final paper due in class. NO LATE PAPERS* —

Research Resources for Cyber Terrorism Projects

The National Security Archive, The September 11th Sourcebooks,
<http://www.gwu.edu/~nsarchiv/NSAEBB/sept11/>. Contains reproductions of many original government documents related to terrorism, nicely organized with abstracts.

Commonwealth Institute, The RMA Debate (on the Revolution in Military Affairs). Contains links to many full-text documents on allied perspectives (not just USA), terrorism, counterterrorism. The two most relevant sections are: Allied Perspectives, <http://www.comw.org/rma/fulltext/allied.html>, and Terrorism and Counterterrorism, <http://www.comw.org/rma/fulltext/terrorism.html>

Institute for National Strategic Studies, Sun Tzu Art of War in Information Warfare, prize-winning articles. <http://www.ndu.edu/inss/siws/cont.html>