

E-Government

Cross-listed as PS119EG or COMP150EG

Fall 2002

Monday and Wednesday, 1:25-2:20, Thursday, 2:55-3:50

Eaton Instructional Lab

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This course is designed to provide an overview of how information technology, particularly the Internet and World Wide Web, are used in government and politics in the U.S. Its intent is to provide a foundation for comparing these uses of technology with theories of government and governance, and to assess how well governmental and political functions are performed with technology. Implicit in the course is an argument that technology is not used very well in government and politics, and the promise of improved government efficiency and responsiveness have not materialized. The challenge for us this semester is to understand the ways in which technology has been used, to discern how and in what ways it could be used better, and to improve upon these existing uses.

We will read some of the literature on e-government, broadly defined, to provide a sense of the uses of technology and the critical issues that technology addresses or tries to address. Additionally, we will learn how to use a particular software product, Macromedia's Dreamweaver, to facilitate the creation of new improved web sites.

Much of the focus of this class is on the municipal (city) web site. We will form small teams of students (probably three or four people each) that will work on a group project for most of the semester. This group project requires that each team select a city in the U.S. with an eye toward re-inventing that city's web site. The group can elect to revise the entire web site, or to concentrate on a specific piece of that site. The purpose of this project is to 1) provide a concrete place to apply the ideas discussed in class and found in the readings; and 2) make significant improvements in the way local governments use the web. This project will be described in more detail in class.

About the Readings: There is only one book that you must purchase for this class, Khristine Annwn Page, *Macromedia Dreamweaver MX: Training from the Source*. This book is available at the Tufts bookstore, and elsewhere. There are many other readings that are required for the class, as listed in the syllabus. To the extent possible, this course has been designed so that the vast majority of these readings are available online. See the course's web site for links to these readings. A small number of the readings listed in the syllabus are not available online. These readings, or excerpts from them, will be provided in class in print form.

You will also need to purchase a zip disk for your own use. This zip disk will be the preferred storage medium for your work, especially work that you do in the public labs. When you are working in your team, each member of the team is responsible for keeping an up-to-date copy of your collective work. You should bring this zip disk to class with you each class meeting.

There will be four graded assignments in the class.

1. The first assignment requires that you select a city anywhere in the U.S. with a 2000 population size of at least 70,000 people. You are to examine this city's web site, and prepare a 3-5 page critique of the site. You can critique the site on whatever grounds you wish as long as you make these grounds explicit. For example, you can criticize the site because it lacks basic information that a particular user might need, and you would presumably make explicit the kind of user who would need that information. You can criticize the site because it fails to provide specific functionality, and again you would be expected to be explicit about who would need or benefit from that functionality. You can criticize the site because of specific design flaws that either make the site less efficient than it could be or make it less functional than it could be. The bottom line is that this assignment requires that you identify the flaw, and explain in some detail why you think this is a flaw. This assignment is due in class on September 11. Some of these critiques will be selected for class presentations on September 18.
2. The second assignment requires that you and your team prepare a "design document" that outlines the proposed revised web site that you will prepare. Each member of the team will be responsible for a specific aspect of this design document. The specific format and outline of the contents of this design document will be provided in class. This design document is expected to serve as the framework for the team project's final product, due at the end of the semester. This design document will be due in class on Monday, September 30.
3. The third assignment is a mid-term exam. The exam will be a take-home essay test focusing on conceptual issues of e-government content and functions, will be given out in class on Monday, October 21, and will be due in class on Monday, October 28.
4. The fourth assignment is the final team project product. This team project requires that you revise a city's web site, and working with two or three other students, create a new and improved version of the site for the city you selected. Each member of the team will be responsible for a specific aspect or portion of this new web site, and each person will be graded based on the quality of that portion as well as the quality of the overall product.

It should be understood that although much of the work in this class is to be prepared in the context of a small team, each of you is responsible for your own work. It is assumed that the work you turn in will be your own, and that you will never turn in the work of someone else as your own.

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September

4 Wednesday **Introduction to Electronic Government -- the subject and the course**

5 Thursday **Introduction to Dreamweaver -- The Basics**
Read: Khristine Annwn Page, *Macromedia Dreamweaver MX: Training from the Source*, Chapter 1.

9 Monday **Web site processes and lifecycles**
Read: *Macromedia Dreamweaver MX*, Chapters 2-3.

11 Wednesday **Organizing the Class Project; Dreamweaver Tables**
Read: *Macromedia Dreamweaver MX*, Chapter 4.

12 Thursday **Dreamweaver: Actions and Events**
Read: *Macromedia Dreamweaver MX*, Chapter 5.

16 Monday **Web site design issues**
Read: Ben Shneiderman, "Designing Information-Abundant Websites: Issues and Recommendations," in *International Journal of Human-Computer Studies*, 1997. Found at
<http://www.cs.umd.edu/hcil/members/bshneiderman/ijhcs/ijhcs.html>

Ben Shneiderman, "Universal Usability," in *Communications of the ACM*, May2000. Found at <http://delivery.acm.org/10.1145/340000/332843/p84shneiderman.pdf?key1=332843&key2=6244689201&coll=portal&dl=ACM&CFID=3932683&CFTOKEN=7057778>

Ben Shneiderman and Harry Hochheiser, "Universal Usability as a Stimulus to Advanced Interface Design," in *Behaviour & Information Technology*, Vol.20, No.5 (Sept-Oct 2001), pp. 367-376. Found at
<ftp://ftp.cs.umd.edu/pub/hcil/Reports-Abstracts-Bibliography/2001-17html/2001-17.pdf>

- 18 Wednesday** **Student Presentations on City Web Sites**
Read: No additional reading.
- 19 Thursday** **Dreamweaver: Site Management**
Read: *Macromedia Dreamweaver MX*, Chapter 6.
- 23 Monday** **Global Perspectives on E-government -- The U.S. in the world context**
Read: *Benchmarking E-government: A Global Perspective*. Found at http://pti.nw.dc.us/links/docs/ASPA_UN_egov_survey.pdf
- Pippa Norris, *The Digital Divide: Civic Engagement, Information Poverty, and the Internet Worldwide*. Cambridge University Press, 2001.
- 25 Wednesday** **E-Government in the American context**
Read: *E-government: The Next American Revolution*, report of the Council for Excellence in Government. Found at <http://www.excelgov.org/techcon/egovex/ebluprint.htm>
- E-government: The Next American Revolution*, report prepared by Hart-Teeter for the Council for Excellence in Government, September 2000. Found at <http://www.excelgov.org/techcon/egovpoll/reptjan/hartfin.htm> and <http://www.excelgov.org/techcon/egovpoll/report/contents.htm>
- Caroline Tolbert, Karen Mossberger, and Ramona McNeal, "Beyond the Digital Divide: Exploring Attitudes about Information Technology, Political Participation, and Electronic Government," Paper presented at the 2002 meetings of the American Political Science Association, Boston. Found at <http://apsaproceedings.cup.org/Site/papers/030/030006McNealRamo.pdf>
- 26 Thursday** **Dreamweaver: Accessibility and Testing; Forms**
Read: *Macromedia Dreamweaver MX*, Chapter 7, 11.
- 30 Monday** **Electronic Government: Functions and Definitions**
Read: *Some Assembly Required: Building a Digital Government for the 21st Century*. Center for Technology in Government, University at Albany, SUNY, 1999. Found at <http://www.ctg.albany.edu/research/workshop/dgfinalreport.pdf>
- Edward Mozley Roche, "Cyberopolis: The Cybernetic City Faces the Global Economy," in Margaret Crahan and Alberto Vourvoulias-Bush, eds., *The City and the World*. New York: Council on Foreign Relations, 1997, pp. 51-69.

Klaus Lenk and Roland Traunmuller, "Broadening the Concept of Electronic Government," in J.E.J. Prins, ed. *Designing E-government: On the Crossroads of Technological Innovation and Institutional Change*. Boston: Kluwer Law International, 2001, pp. 63-71.

October

2 Wednesday

Government websites in the U.S.

Read: Koen Zweers and Kees Planque, "Electronic Government: From an Organization Based Perspective Towards a Client Oriented Approach," in J.E.J. Prins, ed. *Designing E-government: On the Crossroads of Technological Innovation and Institutional Change*. Boston: Kluwer Law International, 2001, pp. 91-118.

Irina Ceaparu and Ben Shneiderman, "Improving Web-based Civic Information Access: A Case Study of the 50 U.S. States," in IEEE International Symposium on Technology and Society, June 2002.

Found at

<ftp://ftp.cs.umd.edu/pub/hcil/Reports-Abstracts-Bibliography/2002-12html/2002-12.pdf>

3 Thursday

Dreamweaver: Editing Code

Read: *Macromedia Dreamweaver MX*, Chapter 12.

7 Monday

Digital Divides in the U.S.

Read: Susan Goslee, *Losing Ground Bit by Bit: Low Income Communities in the Information Age*, report from the Benton Foundation, June 1998. Found at

<http://www.benton.org/Library/Low-Income/low-income.pdf>

Thomas Novak and Donna Hoffman, "Bridging the Digital Divide: The Impact of Race on Computer Access and Internet Use," research monograph, Vanderbilt University, 1998. Found at

<http://elab.vanderbilt.edu/research/papers/html/manuscripts/race/science.html>

A version of this paper is also found in *Science* magazine, April 17, 1998.

Richard Krieg, "Information Technology and Low Income Inner-city Communities," in *Journal of Urban Technology*, Vol. 3, No. 1, Fall 1995.

Lisa Servon and John Horrigan, "Urban Poverty, Access to Information Technology: A Role for Local Government," in *Journal of Urban Technology*, Vol. 4, No. 3, Dec 1997.

9 Wednesday

Digital Divides and government

Read: Lisa Servon and John Horrigan, "Urban Poverty and Access to Information Technology: A Role for Local Government," in *Journal of Urban Technology*, Vol. 4, No. 3, Dec 1997.

- 10 Thursday** **Dreamweaver: Special Issues**
Read: TBA
- 15 Tuesday** **Variations in government web sites**
Read: Irina Ceaparu and Ben Shneiderman, "Improving Web-based Civic Information Access: A Case Study of the 50 U.S. States," in IEEE International Symposium on Technology and Society, June 2002.
Found at
<ftp://ftp.cs.umd.edu/pub/hcil/Reports-Abstracts-Bibliography/2002-12html/2002-12.pdf>
- Michael Margolis and David Resnick, *Politics as Usual: The Cyberspace "Revolution,"* Thousand Oaks, CA: Sage Publications, 2000.
- 16 Wednesday** **E-Commerce Functions**
Read: Genie Stowers, *Commerce Comes to Government on the Desktop: E-Commerce Applications in the Public Sector*, PricewaterhouseCoopers Endowment for the Business of Government, February 2001. Found at <http://endowment.pwcglobal.com/pdfs/StowersReport.pdf>
- U.S. Congress, Office of Technology Assessment, *Making Government Work: Electronic Delivery of Federal Services*, 1993. Found at <http://www.wws.princeton.edu/cgi-bin/byteserv.prl/~ota/disk1/1993/9333/9333.PDF>
- 17 Thursday** **Dreamweaver TBA**
Read: TBA
- 21 Monday** **E-Commerce: Guest Speaker**
No additional readings for today.
- 23 Wednesday** **Municipal government in the U.S.**
Read: TBA
- 24 Thursday** **Team Presentations on Plans for Revised Web Sites**
Read: No additional readings.
- 28 Monday** **Municipal government websites**
Read: Civic Resource Group, *Cities on the Internet 2001: E-Government Applied*, Santa Monica, CA, August 2001. Found at <http://www.civicresource.com/downloads/EGovExecutiveBrief.pdf>
- Civic Resource Group, *City Government Websites in Southern California*, Santa Monica, CA 2000. Found at <http://www.civicresource.com/cityreport.html>

Civic Resource Group, *Cities on the Internet 2001*. Found at <http://www.civicresource.com/research.html>

Jo Steyaert, "Local Governments Online and the Role of the Resident: Government Shop versus Electronic Community," in *Social Science Computer Review*, Vol. 18, No. 1, Spring 2000, pp. 3-16.

Roger Caves and Marco Walshok, "Adopting Innovations in Information Technology: The California Municipal Experience," in *Cities*, Vol. 16, No. 1, pp. 3-12.

Christopher Weare, Juliet Musso, and Matthew Hale, "Electronic Democracy and the Diffusion of Municipal Web Sites in California," in *Administration and Society*, Vol. 31, No. 1, March 1999, pp. 3-27.

Civic Resource Group, *Internet Usage by County Government in California*. Santa Monica, CA: February 2000. Found at http://www.civicresource.com/municipal_research/countystudy.pdf

30 Wednesday

E-democracy

Read: Michael Margolis and David Resnick, *Politics as Usual: The Cyberspace "Revolution,"* Thousand Oaks, CA: Sage Publications, 2000.

Steven Clift, *The E-Democracy E-Book: Democracy is Online 2.0*. Found at <http://www.publicus.net/ebook/edemebook.html>

Voting in the Information Age: The Debate Over Technology. The Democracy Online Project, 2001. Found at <http://democracyonline.org/taskforce/booklet/>

Ryan Thornburg, *Digital Donors: How Campaigns are Using the Internet to Raise Money and How It's Affecting Democracy*. The Democracy Online Project, 2001. Found at <http://democracyonline.org/pdf/thornburgpaper.pdf>

The Minnesota D-Democracy Project. Found at <http://www.e-democracy.org/>

Patricia Tarabelsi, *Internet Voting: Security, Experimentation and Innovation*. Reform America, Inc., 2001. Found at <http://www.reformamericainc.org/paper-edem.shtml>

Internet Policy Institute, *Report of the National Workshop on Internet Voting: Issues and Research Agenda*. March 2001. Found at <http://www.internetpolicy.org/research/results.html>

Todd Davies, Benjamin Sywulka, Randy Saffold, and Roma Jhaveri, "Community Democracy Online: A Preliminary Report from East Palo Alto," Paper presented at the 2002 meetings of the American Political Science Association, Boston. Found at <http://apsaproceedings.cup.org/Site/papers/030/030006DaviesTodd.pdf>

31 Thursday **Team Presentations on Revised City Web Sites**
Read: No additional readings.

November

4 Monday **E-governance**
Read: Amanda Code, Gilles Paquet, and Jeffrey Roy, "E-Governance and Smart Communities: A Social Learning Challenge," in *Social Science Computer Review*, Vol. 19, No. 1, Spring 2001, pp. 80-93.

Peter Levine, "Civic Renewal and the Commons of Cyberspace," in *National Civic Review*, Vol. 90, No. 3, Fall 2001, pp. 205-212.

6 Wednesday **Issues of Security and Privacy**
Read: Michael J. O'Neil and James X. Dempsey, "Critical Infrastructure Protection: Threats to Privacy and Other Civil Liberties and Concerns with Government Mandates on Industry," in *DePaul Business Law Journal*, Vol 12, 1999/2000, p. 97. Found at <http://www.cdt.org/publications/lawreview/2000depaul.shtml>

George Cybenko, Annarita Giani, and Paul Thompson, "Cognitive Hacking: A Battle for the Mind," in *IEEE Computer Magazine*, Vol. 35, No. 8, August 2002, pp. 50-56. Found at <http://lib3.tufts.edu:2085/iel5/2/22017/01023788.pdf?isNumber=22017&prod=JNL&arNumber=1023788&arSt=50&ared=56&arAuthor=Cybenko%2C+G.%3B+Giani%2C+A.%3B+Thompson%2C+P>.

Maura Conway, "Terrorism and Telecommunications: An Analysis of Terrorist 'Use' of the Internet," Paper presented at the 2002 meetings of the American Political Science Association, Boston. Found at <http://apsaproceedings.cup.org/Site/papers/040/040002ConwayMaur.pdf>

7 Thursday **The remaining dates are reserved for special topics that arise in the process of preparing the small group projects.**

13 Wednesday

14 Thursday

18 Monday
20 Wednesday
21 Thursday
25 Monday

December

2 Monday
4 Wednesday
5 Thursday
9 Monday

Other referenced materials for supplemental reading:

Mark A. Abramson and Grady E. Means, eds.. *E-Government 2001* (The Pricewaterhousecoopers Endowment Series on the Business of Government). Rowman and Littlefield, 2002.

Ramon Barquin, Alex Bennet, and Shereen Remez, eds. *Knowledge Management: The Catalyst for Electronic Government*. Management Concepts, 2002.

Ramon Barquin, Alex Bennet, and Shereen Remez, eds. *Building Knowledge Management Environments for Electronic Government*. Management Concepts, 2002.

Jane E. Fountain. *Building the Virtual State: Information Technology and Institutional Change*. Brookings Institution Press, 2001.

Ake Gronlund. *Electronic Government: Design, Applications and Management*. Idea Group Publishing, 2002.

Laura Gutman, Patricia J. Ayers, Donald S. Booth. *Inside Dreamweaver MX*. New Riders Publishing, 2002.

Richard Heeks, ed. *Reinventing Government in the Information Age: International Practice in IT-Enabled Public Sector Reform*.

Douglas Holmes, *eGov: E-Business Strategies for Government*. Nicholas Brealey, 2001.

John A. O'Looney. *Wiring Governments: Challenges and Possibilities for Public Managers*. Quorum Books, 2002.

Ben Shneiderman. *Designing the User Interface: Strategies for Effective Human-Computer Interaction*, 3rd edition. Addison Wesley Longman, 1998.