

Instructor	Attendance	Schedule
Objectives	Grading	Texts



This course has three objectives.

- 1) Students will learn methods of identifying and locating resources on the Internet;**
- 2) Students will be introduced to steps for the assessment and evaluation of information gathered from the Internet;**
- 3) Students will explore issues of access, privacy and other legal and ethical questions that arise in Internet research.**





Our class is based upon one, long, intensive lecture and lab session each week. With that approach we can learn about various methods and issues and pursue them immediately in the lab.

Understanding Internet research thus will only take place through your attendance and participation in the lab. The class will be interesting and fun. You won't want to miss.

Because of the importance of the lab session and because we only meet one day a week, we will have a fairly strict attendance policy.

For any unexcused absence, *your final grade will be lowered a grade level.*

For example, if a student has a solid B in the class and has one unexcused absence, the final grade will be lowered one step to B-. Another unexcused absence results in a C+. Those two extra absences mean two weeks of class and that's too much to miss.

The late policy will also be fairly strict. It's not fair to other students when some keep arriving late. Two late arrivals will equal one absence that will count against your final grade. Any arrival five minutes after class has begun will count as an absence. It's just too disruptive.

I don't anticipate any trouble with attendance. Experience shows that students arrive early and stay late.





Students will be evaluated on the following class requirements:

20% Five small research projects that put into practice weekly class material;

20% A specialized subject guide, such as those produced by www.about.com, compiled on a particular topic from our class. Possible subjects include:

- search strategies
- search engines
- subject directories
- government documents online
- public records online
- online health information
- online business information
- newsgroups and listservs

20% Email responses to me addressing questions based on the online readings; questions will be assigned with each weekly assignment;

20% Research essay on a social or political issue raised by Internet research. The paper, 10-15 double-spaced pages, should be a well-documented work, with traditional and online sources. It should include a full bibliography.

Possible topics include:

- censorship
- access
- copyright
- confidentiality
- privacy
- fair use
- plagiarism

- **government surveillance**
- **online medical records**
- **identity fraud**
- **children and the Internet**
- **workplace privacy**
- **libel and service providers**
- **library filters**
- **electronic commerce**
- **disability**
- **gender issues**
- **education**
- **information poverty**
- **intellectual property rights**

20% End of semester, in-depth research project on a company, person, place, school or other subject. The paper, about 10 double-spaced pages including footnotes, will have extensive documentation. Every source cited should be identified and evaluated in footnotes according to evaluation standards established in our class.





Many books are available in the area of Internet research. Because of the dynamic nature of the field, the books often are out of date before they are published.

Thus, all readings for this course will be taken from or placed on the Web. The readings will be posted the week before each class meeting and should be completed before class.

You will find the readings on the weekly Schedule at the class link below.





Assignments will be posted here in the week before each class meeting. You should have all readings and out of class assignments completed before class. In that way, you will get the most out of our time together.

Week	Assignments due before noon on:	Topic
1	September 3	Introduction: Internet research
2	September 10	Research terms & strategies
3	September 17	Search engines & subject indexes
4	September 24	Search engines: advanced
5	October 1	Evaluation of information
6	October 10 (Wed.)	Specialized tools
7	October 15	Public records
8	October 22	Legal & ethical issues
9	October 29	Online databases & Lexis-Nexis
10	November 5	Newsgroups & listservs
11	November 12	Government information
12	November 19	Business information
13	November 26	Health information
14	December 3	The Internet researcher

Journal



On this first day of class, we will begin with an introduction to the Internet. We will learn a little about the history of the Internet and how it is put together. We'll learn some of the ways that information is gathered and stored on the Internet.

I would also like to learn more about you and your use of the Internet. I will ask you to fill out a brief questionnaire and send it to me via email.

Because it is our first class day, you will have no readings due in advance. Material will be presented in class.

John 3:9



Research Terms and Strategies

People often want to leap quickly into Internet research. Their first step is to sit down at the computer and start throwing terms into Google or Alta Vista.

Professional researchers, from academic scholars to government officials, begin with a research *strategy*. And they also have a firm understanding of basic research terms and concepts.

Our class lecture, discussion and exercises this week will be designed to provide you with the background and skills to formulate a solid research strategy.

In preparation for the week, please visit the following sites that discuss search strategy and syntax.

<http://powerreporting.com/altavista.html>

<http://www.searchenginewatch.com/facts/glossary.html>

<http://204.17.98.73/midlib/tutor.htm>

http://www.cadenza.org/search_engine_terms/srchad.htm#seta

These Web readings take the place of the hours you might spend with a class textbook. Give yourself enough computer time to read thoroughly at the sites.

You probably won't want to do all the readings at once. And they are too large, with many tables and links, for effective printing. Get some coffee or soda and get comfortable in front of the computer.

Before Monday's class, please send me via email for each

site, a good descriptive paragraph that annotates (summarizes and analyzes) its content.

You'll then be well prepared for our class together. See you then.





Search Engines & Subject Indexes

Search engines and subject directories are the primary way most people do Internet research. We've already been introduced to some concepts and terms that will help us better use these tools.

This week, we will look more deeply at the differences between search engines and subject directories and also look at differences among the search tools themselves.

We've identified a good set of readings that should help us understand the strengths and weaknesses of various search tools.

<http://www.kclibrary.org/search/srchengines.htm>

<http://www.searchengineshowdown.com>

<http://www.philb.com/msengine.htm>

<http://www.placedirectory.com/toplinks.htm>

Our class lecture, discussion and exercises this week will build on these readings and help you to be a more formidable user of search engines and subject directories.

Remember, these Web readings take the place of the hours you might spend with a class textbook. Give yourself enough computer time to read thoroughly at the sites.

Before Monday's class, please send me via email the answers to these questions:

*** What's the difference between a subject directory and a search engine?**

* **When would you use a subject directory?**

* **How do search engines work?**

* **What are some of the top search engines and why are they rated so highly?**

With these questions addressed, you'll be well prepared for our class together. See you then.

Journeys



Search Engines: Advanced

We will have four tasks this week.

- 1) We will increase our understanding of search engines.**
- 2) We will get more proficient with our use of search engines.**
- 3) We will explore the emerging social role of search engines in an information society.**
- 4) We will look at the power and potential of more advanced search engines.**

To prepare for our class meeting, I would like you to carry out these assignments:

- 1) Google currently is the dominant search engine in terms of users and profitability. Many students already have seen its effectiveness. Yet many people have not explored the Google site deeply.**

I would like you to read thoroughly at the Google site. Find All About Google. Read the FAQs (Frequently Asked Questions). Read how it compiles results. Read about Advanced Searches. Read as much as you can. Then please send me an email summarizing what you found.

- 2) As you know, September 11, 2001 will be a day you likely will remember for the rest of your lives. The attacks on New York City and Washington immediately changed our society and world.**

The communication of this tragedy is of enduring interest. People sought whatever information they could find. Not

surprisingly, they turned to the Internet and search engines, especially Google.

I would like you to read an analysis of search engine performance, Finding Disaster Coverage At Search Engines, by Danny Sullivan of searchenginewatch.com. In case that link does not work, I've placed a copy of the the article at my site. Please read this analysis and let me know your thoughts in an email.

3) For your first small research project (you will have five, each worth 4% of your grade), I would like you to compile a brief report on Google, the company. Who created it? When? How? How has it been performing?

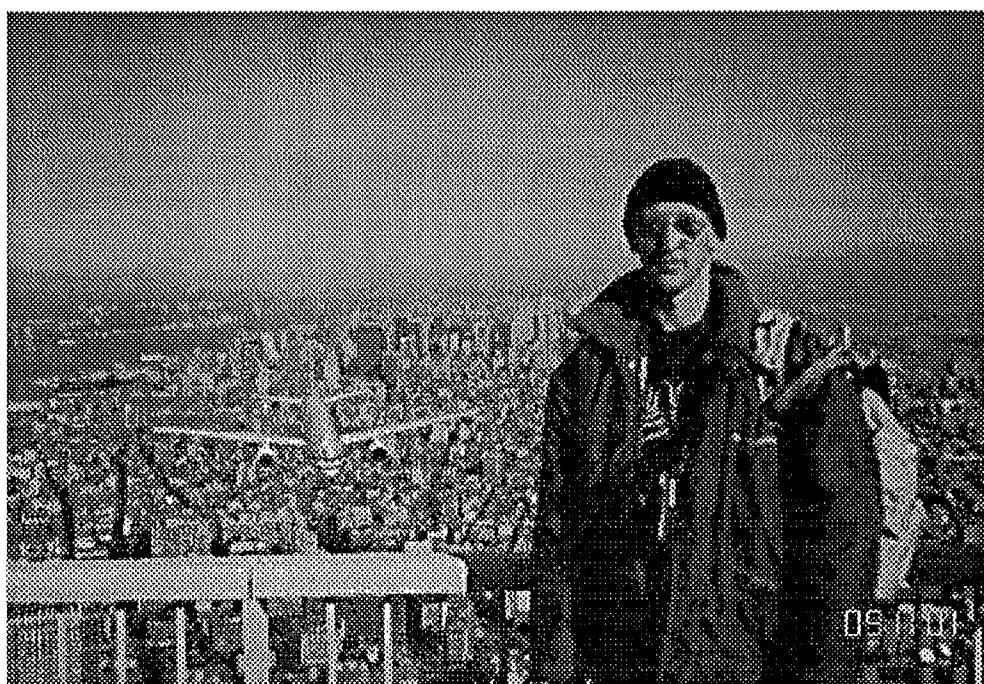
You will find much information on the Web. Also feel free to use other sources such as Lexis-Nexis, Infotrac and the library. One single-space page will be fine. Cite your sources at the end. This first project will be due 4 p.m., Wednesday, September 26. Feel free to send it as email or an attachment.

Many of you have already noticed your Internet research skills increasing. And we've only really begun. See you soon.

John Jones



Evaluating Internet Information



In the last week, I have received this photograph three times from various people via email.

It purports to show a tourist getting his picture taken at the World Trade Center on 9-11-01, just before the first plane hit. The camera supposedly survived the destruction.

Each person who forwarded the message to me explained that he or she could not be sure that the photograph was "real."

Evaluating information found on the Internet has become an extremely important subject. You can find or get lots of information from the Internet. But what good is that information if you cannot be sure it is correct?

To prepare for discussions and exercises on this topic, I would like you to do these readings.

Paul S. Piper, "Better Read That Again: Web Hoaxes and Misinformation," from Searcher: The Magazine for Database Professionals, September 2000.

Elizabeth E. Kirk, "Evaluating Information Found on the Internet," a site created by the electronic and distance education librarian at the Milton S. Eisenhower Library at Johns Hopkins University.

Then, using this work, please send me a brief email explaining how you might go about evaluating web information.

Research Exercise 2: Evaluating Information

Here's the scene: You have graduated and are working at your first job. Knowing that you've taken an Internet research class, your boss assigns you to do research on a difficult topic: global warming.

You get to work. You first compose your search strategy. You then go to a subject directory to compile a list of possible topics. You then try a preliminary search on Google.

Your search yields 537,000 hits. Among the top ten are:

**www.epa.gov/globalwarming/kids
www.globalwarming.org
www.globalwarming.net
www.globalclimate.org**

Are these sites useful to pass along to your boss? Use criteria from our class discussions and/or class readings to evaluate the sites you find. Prepare a 1-2 page report evaluating the sites for your boss. And then send as an email or Word document to me.





Specialized Tools -- and Legal Issues

As you increase your understanding of Internet research, you will find that search engines sometimes are too broad and unwieldy for your research needs. You may simply want to check the credentials of a particular expert. You may need a mailing address. You may need a map.

More specialized tools might be better resources. These include people finders, yellow pages, mapping tools and document finders. We will look at a number of these resources in class.

But these resources raise large questions related to rights of privacy. How much information *should * be available about people on the Internet? How should this information be used?

We will deal with such legal and ethical issues in upcoming weeks. For this week, I want us to consider rights of privacy in light of the terrible events of September 11.

In the face of terrorist threats, some people are proposing that U.S. citizens give up some of their rights to privacy so that the government can find more information about potential terrorists.

The New York Times has run a number of articles about this issue. I would like you to consider two of them. Because the *Times* eventually places its articles in archives, I have copied two of them at my site.

["In the Next Chapter, Is Technology an Ally?" by Katie Hafner, published on September 27, 2001.](#)

["Living Under an Electronic Eye," by Lisa Guernsey, also](#)

published on September 27, 2001.

To prepare for our class discussions and exercises on this topic, I would like you to do these readings. Please then send me an email outlining the issues raised by each article. Thanks. See you in class.





Public Records

In a democracy, government and its officials work for the people, the public. The records of government officials therefore should be public.

The public votes for – “hires” – those officials. The public pays them. The public needs to have information to judge them. Public records are the records of governments made available to the people.

Examples of public records are:

- Voting records of politicians
- Donations given to politicians
- Court cases
- Birth and death certificates
- Financial records of non-profit organizations

Many people are surprised to find how much information is available to them. They shouldn't be. Government information belongs to the people.

The Internet has the ability to make information available as never before. Because of this, some officials would like to see access to public records curtailed.

To prepare for our class discussions and exercises on this topic, I would like you to visit an important Internet site -- the Electronic Frontier Foundation at <http://www.eff.org>. Please read and roam at this site and then send me an email detailing what you found. Thanks. See you in class.





Legal & Ethical Issues

Legal and ethical issues help us broaden considerably our study of Internet research. Even relatively skilled researchers fail to consider the legal and ethical dimensions of giving and receiving information on the Internet.

Yet legal and ethical issues abound, including controversies over:

- **censorship**
- **access**
- **copyright**
- **confidentiality**
- **privacy**
- **fair use**
- **plagiarism**
- **government surveillance**
- **online medical records**
- **identity fraud**
- **children and the Internet**
- **workplace privacy**
- **libel and service providers**
- **library filters**
- **electronic commerce**
- **disability**
- **gender issues**
- **education**
- **information poverty**
- **intellectual property rights**

We will survey some of these issues in class. In advance, I would like you, once again, to pay one focused visit to an important web site. This time, I would like you to visit: The Centre for Computing and Social Responsibility at

<http://www.ccsr.cse.dmu.ac.uk>

Read about this important group. Go to their Resources section and pursue in depth some of the legal and ethical issues they are confronting. Send me an email detailing what you found. We'll go into some of these topics in more detail in class - and for our final papers.

Thanks and see you.





Online Databases & Lexis-Nexis

Much online information is not available through search engines or subject directories. Giant databases of wonderfully aggregated and organized information is unavailable -- *except for a price*.

These fee-based databases go by many names -- professional online services, gated sites, commercial vendors.

Examples include Dialog, LEXIS-NEXIS and Dow Jones Interactive, sometimes called Factiva.

These services can be tremendously expensive, charging hundreds of dollars an hour during a search. But many services provide discounts to universities. The services want students to know and want their products so they'll ask their employers for them in the future.

Lehigh has accounts with many of these databases. We'll explore them in class. In preparation, I would like you to become familiar with perhaps the most popular and important fee-based database: Lexis-Nexis.

As the name implies, the database actually has two sides. Lexis offers a huge trove of legal information, comparable only to Westlaw. If you have any thoughts of law school, you will know Lexis and Westlaw.

Nexis provides access to hundreds of newspapers, magazines, business journals and other publications. You don't just search and get abstracts. You can often search and get the full text of articles right on your desktop.

Before class, I would like you to become familiar with

Lexis-Nexis, if you are not already. Lehigh receives a version called "Academic Universe."

From Lehigh's home page, you can bring down the Libraries menu and go to Electronic Resources. From there you can take the link to the many Databases available to Lehigh. Browse down to Lexis-Nexis Academic Universe.

At Lexis-Nexis, look over the Site Map, the How Do I, and Help sections. Look particularly at "Researching: The Basics."

Send me an email detailing what you think. Have you used NEXIS before? What for? How might it be useful to you?

Thanks and see you.

your 398



Newsgroups & Listservs

Newsgroups and listservs have emerged as important tools for Internet research.

They are actually *not* good sources of news or information. But they are wonderful sources for people, stories, anecdotes and trends in particular subject areas.

For example, if you wanted to know about online news, one of the best places to find experts on the topic would be the online news listserv.

You should know how to tap into the power of newsgroups and listservs. In class, we will see the depth and variety of these "virtual communities."

For now, I would like you to get familiar with how newsgroups and listservs work.

Please read these brief descriptions of how listservs and newsgroups help researchers.

Then go to the discussion of listservs at Server Watch.

Send me an email discussing what you found. How are newsgroups and listservs useful? Do you belong to any? Could they be useful for research?

Thanks and see you.



Government Information Online

Thick volumes have been written about government information on the Internet. Indeed, often the trouble with researching online government information is *how much* information there is.

We will work this week to develop strategies for searching this huge storehouse of crucial information.

Of course, another problem with government information is restriction. Yes, there is a lot of government information online. But much information is also denied. We will want to consider again questions of access and censorship as we research government information.

Where to begin? To prepare us for our research into online government information, one of the nicest places to begin is the Library of Congress:

<http://www.loc.gov>

The Library is an invaluable national treasure. The web site provides a fine introduction and also serves as a good gateway to federal information online.

Spend some time at the site. Keep track of where you go and what you see. Visit the FAQ -- Frequently Asked Questions -- and learn about this great resource. Then send me an email discussing what you found.

Thanks and see you in the stacks.



Business Information Online

In business, information often means money. What you don't know, can cost you.

Before the Internet, information was in the hands of a select few. Online technology has proved to be a great equalizer, making information available to many.

The Internet is an incredible resource for information about business and businesses.

You can track industries in which you'd like to work, like entertainment or news. You can use the Internet to do research on a company or person. You can get investment advice.

As with other subjects, the problem is the amount of business information available online.

We will work this week to develop strategies for searching through this important information.

Exercise

To cap off our work, I would like you to put your skills to the test. Select a company in which you are interested or for whom you'd like to work.

Using the principles we discussed in class, do a one-page background report on that company. Find as much information as you can from the SEC, EDGAR and its off-shoots, 10-K forms, company web sites, business wire services, Hoovers and other resources.

Your report should include basic information, such as

executives, business location and the kind of products produced. Then provide as much current information as you can about plans, profits, problems, competition and such.

Think of the report as a primer for you to take to a job interview. Show that you know about the company and where it is heading.

Please send me the report as a Word document. Any questions, feel free to send me an email.

Thanks and see you.





Health Information Online

In sickness and in health, the Internet can be a valuable tool. Some studies suggest that more than half the online searches undertaken are health related.

As with many other areas, from business to law, the Internet has put more information into the hands of more people than ever before.

With health information in particular, the online researcher must carefully evaluate and judge Internet sources.

Trusty Google can take you to many sites. Some are well intentioned but wrong. Others can be malicious and dangerous.

We will spend time in class thinking about how to evaluate health information. We will look at trustworthy sites. We'll consider some not so trustworthy.

To prepare ourselves for this work, I would like you to visit a database that has long served as a repository of medical information.

Medline, at the National Library of Medicine, has been around since 1966. With the advent of online technology, the database has been put into the hands of millions of people.

Visit Medline at www.nlm.nih.gov. Get a feel for how the Library organizes information. Roam through the online stacks. We'll focus our research in class.

Thanks and be well.