

University of Wisconsin – Milwaukee  
School of Information Studies

**L&I SCI 691**  
**Special Topics in Information Science:**  
**The Search Engine Society**

Summer 2011  
Jun 27, 2011 - Aug 20, 2011  
Online

**Instructor:**

Michael Zimmer, PhD  
Office: Bolton Hall, Room 656  
Phone: 414-229-3627  
E-mail: [zimmerm@uwm.edu](mailto:zimmerm@uwm.edu)  
Google Chat / Jabber: michael.zimmer@gmail.com  
Office hours: by appointment

**Description:**

This course will examine the role of search engines in our information society, including their various impacts on information institutions, information policy, and information ethics.

**Course Summary:**

Search engines have become the center of gravity of our contemporary information society, providing a powerful interface for accessing the vast amount of information available on the World Wide Web and beyond. The audacious mission of Google, for example, is “to organize the world's information and make it universally accessible and useful.” Attaining such a goal necessarily results in significant changes to the ways in which information is created, stored, retrieved, and used. This course will critically examine the nature of search engines and their role in our information society, and reveal the unique challenges they bring to bear on information institutions, information policy, and information ethics.

**Course Goal:**

The goal of this course is to situate search engines within the broader sphere of information studies, critically evaluate their impact on information institutions (libraries, news organizations, publishers), and deliberate on their broader policy and ethical ramifications (copyright and fair use, privacy, censorship, intellectual freedom).

**Student Learning Objectives:**

Upon successful completion of the course, students will:

1. Understand how search engines and related products and services work from a technical perspective
2. Understand how search engines impact the nature of information, as well as various information institutions and professions
3. Recognize numerous information policy and ethical implications of our expanding search engine society

**Method of Instruction & Learning:**

- Online viewing of recorded lectures and related videos, online discussion and chat.

**Prerequisites:**

- Junior standing (undergraduates), L&I SCI 501 (graduate students), or permission of instructor
- Students will need basic technical familiarity with how the Internet and World Wide Web operate.

**MLIS Core Competencies Addressed:**

- Foundations of the Profession: National and international social, public, information, economic, and cultural policies and trends of significance to the library and information profession.

**Course Materials:**

- Required text:
  - o Halavais, A. (2008). *Search Engine Society*. Cambridge: Polity.
- Recommended texts: (chapters will be available on D2L, but you might be interested in entire text)
  - o Battelle, J. (2005). *The search: How Google and its rivals rewrote the rules of business and transformed our culture*. New York: Portfolio.
  - o Vaidhyanathan, S. (2011). *The Googlization of everything (And why we should worry)*. Berkeley, CA: University of California Press.
- All additional readings available via D2L

**Course Schedule:** (subject to change; check D2L for additional web links and minor additions)

<b>Week 1 – Introductory Concepts &amp; Concerns</b> (June 27-July 3)	<ul style="list-style-type: none"> <li>- View: “Google: Behind the Screen” <a href="http://www.youtube.com/watch?v=TBNDYggyesc">http://www.youtube.com/watch?v=TBNDYggyesc</a></li> <li>- Halavais, “Introduction”</li> <li>- Vaidhyanathan, “Introduction: The Gospel of Google”</li> </ul>
<b>Week 2 – History and Overview of Search Technologies</b> (July 4-10)	<ul style="list-style-type: none"> <li>- Halavais, Ch. 1 “The Engines” &amp; Ch. 2 “Searching”</li> <li>- Battelle, Ch. 3 “Search Before Google”</li> <li>- Van Couvering, E. (2008). The History of the Internet Search Engine: Navigational Media and the Traffic Commodity. In A. Spink &amp; M. Zimmer (Eds.), <i>Web Searching: Multidisciplinary Perspectives</i> (pp. 177-206). Dordrecht, The Netherlands: Springer.</li> <li>- (optional) Brin, S., &amp; Page, L. (1998). The Anatomy of a Large-Scale Hypertextual Web Search Engine. <i>WWW7 / Computer Networks</i>, 30(1-7), 107-117. <a href="http://infolab.stanford.edu/~backrub/google.html">http://infolab.stanford.edu/~backrub/google.html</a></li> </ul>
<b>Week 3 – The Structure of Search: Winners &amp; Losers</b> (July 11-17)	<ul style="list-style-type: none"> <li>- Halavais, Ch. 3 “Attention” &amp; Ch. 4 “Knowledge &amp; Democracy”</li> <li>- Battelle, Ch. 7 “The Search Economy”</li> <li>- Grimmelmann, J. (2009). The Google Dilemma. <i>New York Law School Law Review</i>, 53 (pages 1-3 only)</li> </ul>
<b>Week 4 – Censorship, Free Speech, and Diversity of Search Results</b> (July 18-24)	<ul style="list-style-type: none"> <li>- Halavais, Ch. 5 “Censorship”</li> <li>- Grimmelmann, J. (2009). The Google Dilemma. <i>New York Law School Law Review</i>, 53 (pages 4-11)</li> <li>- Thompson, C. (2006, Apr. 23). “Google's China Problem (and China's Google Problem)” <i>New York Times Magazine</i>. <a href="http://www.nytimes.com/2006/04/23/magazine/23google.html">http://www.nytimes.com/2006/04/23/magazine/23google.html</a></li> <li>- Rosen, J. (2008, Nov. 28). “Google’s Gatekeepers” <i>New York Times Magazine</i>. <a href="http://www.nytimes.com/2008/11/30/magazine/30google-t.html">http://www.nytimes.com/2008/11/30/magazine/30google-t.html</a></li> <li>- Various web articles on Michelle Obama image controversy (D2L)</li> </ul>

<b>Week 5 – Search Privacy &amp; Surveillance</b> (July 25-31)	<ul style="list-style-type: none"> <li>- Halavais, Ch. 6 “Privacy”</li> <li>- Battelle, Ch. 11 “Perfect Search” (pages 251-261)</li> <li>- Zimmer, M. (2008). The Gaze of the Perfect Search Engine: Google as an Infrastructure of Dataveillance. In A. Spink &amp; M. Zimmer (Eds.), <i>Web Searching: Multidisciplinary Perspectives</i> (pp. 77-99). Dordrecht, The Netherlands: Springer.</li> <li>- Hoofnagle, C. (2009). Beyond Google and evil: How policy makers, journalists and consumers should talk differently about Google and privacy. <i>First Monday</i>, 14(4).  <a href="http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2326/2156">http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/2326/2156</a> .</li> <li>- Wikipedia: Google Street View Privacy Concerns.  <a href="http://en.wikipedia.org/wiki/Google_Street_View_privacy_concerns">http://en.wikipedia.org/wiki/Google_Street_View_privacy_concerns</a></li> </ul>
<b>Week 6 – Google Book Search: Access vs. Copyright</b> (Aug 1-7)	<ul style="list-style-type: none"> <li>- Vaidhyathan, Ch. 5 “Googlization of Knowledge: The Future of Books”</li> <li>- Grimmelmann, J. (2009). How to Fix the Google Book Search Settlement, <i>Journal of Internet Law</i>.</li> <li>- Samuelson, P. (2009). The Dead Souls of the Google Book Search Settlement, <i>Communications of the ACM</i>, 52(7), 28-30.</li> <li>- ALA, ACRL, ARL Google Book Settlement briefs (skim)</li> </ul>
<b>Week 7 – Google Book Search: Privacy &amp; Intellectual Freedom</b> (Aug 8-14)	<ul style="list-style-type: none"> <li>- Center for Democracy &amp; Technology (2009). Privacy Recommendations for the Google Book Search Settlement.  <a href="http://cdt.org/copyright/20090727_GoogleRecs.pdf">http://cdt.org/copyright/20090727_GoogleRecs.pdf</a></li> <li>- Zimmer, M. (2009). Thoughts on Privacy and the Google Book Settlement: What’s At Stake, Why We Need to Advocate, and What We Can Do. Presented at The Google Books Settlement and the Future of Information Access conference, UC-Berkeley School of Information.</li> <li>- Zimmer, M. (2009). Will Google Use “Editorial Discretion” to Exclude Books from Book Search?, <i>MichaelZimmer.org</i>.  <a href="http://michaelzimmer.org/2009/07/29/will-google-use-editorial-discretion-to-exclude-books-from-book-search/">http://michaelzimmer.org/2009/07/29/will-google-use-editorial-discretion-to-exclude-books-from-book-search/</a></li> </ul>
<b>Week 8</b> (Aug 15-21)	<ul style="list-style-type: none"> <li>- Work on final research paper (due midnight, August 21)</li> </ul>

**Course Elements:**

1. Weekly Segments:

- a. The course is broken into 8-weeks. A course of this nature usually is over 15-16 weeks in a non-summer semester, so given the condensed format, there is a lot of information packed into each week. If you fall behind, it will be difficult to catch up. *Don’t fall behind....*
- b. It is each student’s responsibility to do the readings, setting aside enough time so you are not rushing through them. I’d suggest jotting down notes or questions that you can use for the discussion/participation element (see below).
- c. Lecture text and supporting screen capture videos will be posted by Monday morning each week providing a walkthrough of the week’s core concepts and issues, as well as providing online examples and demonstrations of the week’s topic. Students are expected to carefully read/view these files to guide their understanding of the readings and core issues. I suggest taking notes while you read/watch, and bring up questions or issues in the discussion/participation element (see below).

2. Weekly Discussion Leader (graduate students only):
  - a. Each graduate student will be required to lead online discussions during a chosen week. During the first week, we will determine weekly discussion leader assignments for the rest of the semester. (Given the number of grad students enrolled, there will likely be 2 leaders for most weeks)
  - b. Discussion leaders are required to initiate class discussion by posting a minimum 200-word commentary on the week's topic and/or assigned readings, and should prompt classmates to consider a particular issue or question to discuss. Discussion leaders will be expected to post their commentary no later than 8 AM Wednesday of the assigned week. At that point, the rest of the class will be expected to pick up on discussion through the remainder of the week. The discussion leader is responsible to read and react to any responses left in his/her discussion thread.
3. Participation:
  - a. All students are expected to actively and constructively participate in class through the weekly discussion threads created by the Discussion Leader (above). I will be tracking contributions by each student for the "Participation" grade element. If you make well-informed and relevant contributions on a consistent basis, then you should score very well (simply posting a response of "I agree" is not sufficient). However, do not feel you need to hog the discussion – online discussion benefits from quality over quantity.
  - b. In order to accomplish participate constructively, it is imperative that you prepare for discussions – do the readings in advance, and jot down questions or things you disagree with to bring up online. Then, track the discussion and provide any additional comments as needed.
4. News Commentary:
  - a. At some point during the semester, all students will be expected to find and discuss a current event or news article that involves a search engine company. News stories can be found via your preferred online news source, from a search engine company's own blog, or related sources.
  - b. The commentary should be between 300 and 500 words, provide a link to (or scanned image of) the article/issue, a brief synopsis of the news or event, and effectively discuss how it relates to issues addressed in the course. Each student must post their commentary on D2L for other members of the class to see. Discussion will be enabled; commenting on another student's assignment can contribute to your overall participation grade, but it is not required.
  - c. Students may complete this assignment any time between 7/4 and 8/14. Note: the assignment may NOT be completed during the first (6/27 – 7/3) or last (8/15 – 8/21) weeks of the course.
5. Research Paper:
  - a. Students will be required to write a short research paper in lieu of a final exam. The paper will focus on one of the broad topics discussed in class, describing the impact of search engines on the nature of information, institutions and/or professions, and present (at least) two different positions within the debate surrounding the issue. You must cite readings used in class, as well as reliable and appropriate sources found elsewhere.
  - b. Students will write a *brief proposal* for their final research paper (graded for credit). The proposal should open with a brief discussion of the broader issue, and then mention a more specific example that will be researched. Five potential resources/citations should also be identified and provided. Length should be 250-400 words. Proposal is be due via D2L by 10pm Sunday August 7. Feedback will be provided on the proposal do help you write the final paper.

- c. Final papers are due via D2L by 10pm Sunday August 21. Requirements vary:
- i. *Undergraduate* students will be required to write 8-10 pages, which will be more descriptive in nature (what is the nature of the debate).
  - ii. *Graduate* students will be required to write 12-15 pages, and will need to articulate and defend their own position on the topic; thus, a more normative paper (what is the nature of the debate, and argue for what you think is right or should be done).

**Class Policies:**

<u>Credit Breakdown:</u>	<u>UG</u>	<u>GR</u>	<u>Grading Scale:</u>			
Participation	20%	15%	A	94-100	C	74-77
Discussion leadership		15%	A-	91-93	C-	71-73
News Commentary	30%	20%	B+	88-90	D+	68-70
Research Paper Proposal	10%	10%	B	84-87	D	64-77
Research Paper	40%	40%	B-	81-83	D-	60-63
			C+	78-80	F	0-59

**Evaluation Rubric:**

- Below is a general description of how grades are assigned for required course elements. Pluses and minuses may be employed to fine-tune the evaluation. In this grading scheme, a "B," for example, is not a subtraction from an initial state of an "A," but rather recognition of good and thorough work. Grades will be reduced for late assignments, with no guarantee for any credit for late submission.

*A = Excellent; you “wow”ed me.* Work demonstrates impressive understanding of readings, discussions, themes and ideas. Written work is fluid, clear, analytical, well-organized and grammatically polished. Reasoning and logic are well-grounded and examples precise. *A*-quality work often cites outside materials, draws connections between topics from multiple sessions, and generally impresses.

*B = Good; a clear understanding of the topic.* Work demonstrates a thorough and solid understanding of readings, discussions, themes and ideas. Written work is clear and competent, but is somewhat general, a bit vague, or otherwise lacking in precision. While analytical, writing presents more description than analysis. Arguments are solid but not thoroughly original or polished.

*C = Fair; shows limited understanding, or limited amount of effort.* Work demonstrates a somewhat fragmented understanding of readings, discussions, themes and ideas. Shows acquaintance with readings and ideas, but not intellectual engagement. Written work is choppy and argument somewhat difficult to follow, examples are vague or irrelevant, and ideas are imprecise. Work veers toward underdeveloped ideas, off-topic sources or examples, personal anecdotes, creative writing, memoir, etc.

*D = Unsatisfactory.* Work demonstrates little understanding or even acquaintance with readings, discussions, themes and ideas. Written work is choppy, fractured and unclear. Submission has little logical development, and reveals little effort to really engage.

*F = Failure / Unacceptable.* Work does not demonstrate understanding of topics, ideas and readings. This is also the grade for work not submitted and plagiarized work.

### Atmosphere for Learning:

- Students are encouraged to participate in open and frank discussions of the course material, but are also expected to respect the opinions of other students and to engage in discussion and debates in a sensitive and respectful manner.

### Assignments:

- All written assignments must be turned in on time to the appropriate D2L dropbox or discussion thread. Late submissions will not be allowed except for a confirmed emergency with instructor's pre-approval.
- Papers are to be typed, double-spaced, with one-inch margins. Use a 12-point kerned font such as Times New Roman. Multi-page documents should have page numbers and be stapled. *Don't forget your name, the course number, an assignment description, and the date.* Assignments turned in via D2L should be in .doc, .docx, or .rtf format.
- Rules of academic conduct require that you not use the work of others without clearly indicating it as such (using proper and consistent citation formats). Academic misconduct may result in a lowered grade, no credit for a given assignment, or failure of the course.

### Contacting Me:

- Via chat: I will respond to class-related instant message chats via Google Chat/Jabber protocol (find me at michael.zimmer@gmail.com) during normal work hours, and occasionally in the evenings – if you see me online, feel free to send a message. When contacting me via chat, please be sure to introduce yourself by name and as a student in this class. Some course business is more suitable for an email or face-to-face discussion, thus I might defer the discussion appropriately.
- By email: I will respond to class-related emails during normal work hours, and will generally reply the same day as received (an e-mail sent after working hours, however, may not be replied to until the next morning). Please be sure to use your UWM e-mail account, identify yourself and the course, and *always* use proper and professional e-mail etiquette. For example, don't start your e-mail with "Hey Mike" or end with "Kthxbai!" (There's a good guide to student email etiquette here: <http://www.ust.udel.edu/action/Current%20Students/Academics/email.aspx>)
- In person: I will be available for face-to-face discussions for local students by appointment.

### **UWM and SOIS Academic Policies:**

The following links contain university policies affecting all SOIS students. Many of the links below may be accessed through a PDF-document maintained by the Secretary of the University:

<http://www.uwm.edu/Dept/SecU/SyllabusLinks.pdf>.

Undergraduates may also find the ***Panther Planner and Undergraduate Student Handbook*** useful (<http://www.uwm.edu/Dept/OSL/DOS/Handbook2005-06.pdf>). For graduate students, there are additional guidelines from the Graduate School ([http://www.uwm.edu/Dept/Grad\\_Sch/StudentInfo/](http://www.uwm.edu/Dept/Grad_Sch/StudentInfo/)), including those found in the ***Graduate Student and Faculty Handbook***: [http://www.uwm.edu/Dept/Grad\\_Sch/Publications/Handbook/](http://www.uwm.edu/Dept/Grad_Sch/Publications/Handbook/).

- Students with disabilities. If you will need accommodations in order to meet any of the requirements of a course, please contact the instructor as soon as possible. Students with disabilities are responsible to communicate directly with the instructor to ensure special accommodation in a timely manner. There is comprehensive coverage of issues related to

disabilities at the Student Accessibility Center

(<http://www.uwm.edu/Dept/DSAD/SAC/MainOffice.html> ), important components of which are expressed here: <http://www.uwm.edu/Dept/DSAD/SAC/SACltr.pdf>.

- Religious observances. Students' sincerely held religious beliefs must be reasonably accommodated with respect to all examinations and other academic requirements, according to the following policy: [http://www.uwm.edu/Dept/SecU/acad%2Badmin\\_policies/S1.5.htm](http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S1.5.htm). Please notify your instructor within the first three weeks of the Fall or Spring Term (first week of shorter-term or Summer courses) of any specific days or dates on which you request relief from an examination or academic requirement for religious observances.
- Students called to active military duty. UWM has several policies that accommodate students who must temporarily lay aside their educational pursuits when called to active duty in the military (see <http://www3.uwm.edu/des/web/registration/militarycallup.cfm>), including provisions for refunds, readmission, grading, and other situations.
- Incompletes. A notation of "incomplete" may be given in lieu of a final grade to a student who has carried a subject successfully until the end of a semester but who, because of illness or other unusual and substantial cause beyond the student's control, has been unable to take or complete the final examination or some limited amount of other term work. An incomplete is not given unless the student proves to the instructor that s/he was prevented from completing course requirements for just cause as indicated above ([http://www.uwm.edu/Dept/SecU/acad%2Badmin\\_policies/S31.pdf](http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S31.pdf)).
- Discriminatory conduct (such as sexual harassment). UWM and SOIS are committed to building and maintaining a campus environment that recognizes the inherent worth and dignity of every person, fosters tolerance, sensitivity, understanding, and mutual respect, and encourages the members of its community to strive to reach their full potential. The UWM policy statement ([http://www.uwm.edu/Dept/SecU/acad%2Badmin\\_policies/S47.pdf](http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S47.pdf)) summarizes and defines situations that constitute discriminatory conduct. If you have questions, please contact an appropriate SOIS administrator.
- Academic misconduct. Cheating on exams and plagiarism are violations of the academic honor code and carry severe sanctions, ranging from a failing grade for a course or assignment to expulsion from the University. See the following document (<http://www.uwm.edu/Dept/OSL/DOS/conduct.html>) or contact the SOIS Investigating Officer (currently the Associate Dean) for more information.
- Complaints. Students may direct complaints to the SOIS Dean or Associate Dean. If the complaint allegedly violates a specific university policy, it may be directed to the appropriate university office responsible for enforcing the policy.
- Grade appeal procedures. A student may appeal a grade on the grounds that it is based on a capricious or arbitrary decision of the course instructor. Such an appeal shall follow SOIS appeals procedures or, in the case of a graduate student, the Graduate School. These procedures are available in writing from the respective department chairperson or the Academic Dean of the College/School ([http://www.uwm.edu/Dept/SecU/acad%2Badmin\\_policies/S28.htm](http://www.uwm.edu/Dept/SecU/acad%2Badmin_policies/S28.htm)).
- Examinations, Finals. The Secretary of the University is authorized to prepare the final examination schedule. The time of the final examination for an individual or a class may be changed only with the prior approval of the dean or director of the respective college/school. The change will involve a postponement to a later date. For individuals with exam conflicts, a separate week at the very end of the exam week will be reserved to take one of the conflicting exams ([http://www.uwm.edu/Dept/SecU/acad+admin\\_policies/S22.htm](http://www.uwm.edu/Dept/SecU/acad+admin_policies/S22.htm)).

- D2L and Student Privacy: Certain SOIS courses utilize the instructional technology Desire to Learn (D2L) to facilitate online learning. D2L provides instructors the ability to view both individual data points and aggregate course statistics, including the dates and times individual students access the system, what pages a student has viewed, the duration of visits, and the IP address of the computer used to access the course website. This information is kept confidential in accordance with the Family Educational Rights and Privacy Act (FERPA), but may be used by the instructor for student evaluation within the constraints of this particular course.