University of Wisconsin – Milwaukee
School of Information Studies

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

Summer 2013
Online

Instructor:
Michael Zimmer, PhD
Office: Northwest Quadrant, Building B, Room 2531
Phone: 414-229-3627
E-mail: 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: (available at UWM Bookstore, or online)

- Recommended texts: (chapters will be available on D2L, but you might be interested in entire text)

- All additional readings available via D2L

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

| Week 1 – Introductory Concepts & Concerns (May 28 - June 2) | - Halavais, “Introduction”
- View: “Google: Behind the Screen”
  [http://www.youtube.com/watch?v=TBNDYggyesc](http://www.youtube.com/watch?v=TBNDYggyesc) |
|----------------------------------------------------------|
| Week 2 – History and Overview of Search Technologies (June 3-9) | - View: “The Evolution of Search”,
  [http://www.youtube.com/watch?v=mTBShTwCnD4](http://www.youtube.com/watch?v=mTBShTwCnD4)
- Halavais, Ch. 1 “The Engines” & Ch. 2 “Searching”
- Battelle, Ch. 3 “Search Before Google”
| Week 3 – The Structure of Search: Winners & Losers (June 10-16) | - Halavais, Ch. 3 “Attention” & Ch. 4 “Knowledge & Democracy”
- Battelle, Ch. 7 “The Search Economy”
| Week 4 – Censorship, Free Speech, and Diversity of Search Results (June 17-23) | - Halavais, Ch. 5 “Censorship”  
- Various web articles on Michelle Obama image controversy (D2L) |
| Week 5 – Search Privacy & Surveillance (June 24 – June 30) | - Halavais, Ch. 6 “Privacy”  
- Battelle, Ch. 11 “Perfect Search” (pages 251-261)  
- Vaidhyanathan, Ch. 5 “Googlization of Knowledge: The Future of Books”  
- ALA, ACRL, ARL Google Book Settlement briefs (skim), and various links on D2L |
| Week 8 (July 15-21) | - Research Paper Proposal due 11:59pm, July 21 |
| Weeks 9-10 (July 22 – Aug 3) | - Work on final research paper (due 11:59pm, Saturday August 3) |
Course Elements:

1. **Weekly Segments:**
   a. The course is broken into 10-weeks: 8 weeks of content, and 2 weeks to work on your final research paper. A course of this nature usually is over 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 particular week. Assignments will be posted in the first week of class. Depending on the size of the course, there might be more than one student assigned in a particular week.
   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 noon 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.
   c. Participation might also include assorted worksheets or short written responses as assigned.

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, controversy, or other relevant issue. 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 will contribute to your overall participation grade.

c. Students must complete this assignment any time between 6/10 and 7/21. Note: the assignment may NOT be completed during the first (5/28-6/9) or last two weeks (7/22 – 8/3) of the course.

5. Research Paper:
   a. Students will be required to write a 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 are required to 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 (use the library databases and scholarly sources, along with news and online sources). Length should be 250-400 words. Proposal is due via D2L by 11:59pm Sunday July 21. Feedback will be provided on the proposal to guide your progress on the final paper.
   c. Final papers are due via D2L by 11:50pm Saturday August 3. 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 both describe the issue, as well as 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:

Credit Breakdown: UG GR
Participation 20% 15%
Discussion leadership 15%
News Commentary 30% 20%
Research Paper Proposal 10% 10%
Research Paper 40% 40%

Grading Scale:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>94-100</td>
</tr>
<tr>
<td>A-</td>
<td>91-93</td>
</tr>
<tr>
<td>B+</td>
<td>88-90</td>
</tr>
<tr>
<td>B</td>
<td>84-87</td>
</tr>
<tr>
<td>B-</td>
<td>81-83</td>
</tr>
<tr>
<td>C+</td>
<td>78-80</td>
</tr>
<tr>
<td>C</td>
<td>74-77</td>
</tr>
<tr>
<td>C-</td>
<td>71-73</td>
</tr>
<tr>
<td>D+</td>
<td>68-70</td>
</tr>
<tr>
<td>D</td>
<td>64-77</td>
</tr>
<tr>
<td>D-</td>
<td>60-63</td>
</tr>
<tr>
<td>F</td>
<td>0-59</td>
</tr>
</tbody>
</table>

Evaluation Rubric:

- For each assignment you will receive a score based on a 100-point scale. I will convert that raw score into a point value toward your final grade based upon the weighting of that particular assignment. For example, a score of 85 on the final research paper (worth 40% of the overall grade) would convert to 34 points toward your final grade. Your final grade will be the sum total of all converted point values for each course deliverable. This method allows me to provide a more precise calculation of your final grade than would be the case if I only assigned letter values throughout the semester.
Points awarded on the 100-point scale can be converted to letter grades based on the above scale, and relate to following general evaluation rubric:

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 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.
Special Considerations:

- Please don’t ask for extensions, make-up assignments, or extra credit (other than what might be offered to the entire class); special considerations are provided only in rare and exceptional cases. Here is UWM’s policy on “special consideration,” which I strive to follow closely:

  **Special Consideration.** The principle of equal treatment of all students shall be a fundamental guide in responding to requests for special consideration. No student should be given an opportunity to improve a grade that is not made available to all members of the class. This policy is not intended to exclude reasonable accommodation of verified student disability, or the completion of work missed as the result of religious observance, verified illness, or justified absence due to circumstances beyond the student's control. ([http://www4.uwm.edu/secu/policies/saap/upload/S29.htm](http://www4.uwm.edu/secu/policies/saap/upload/S29.htm))

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](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](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](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](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](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. 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).

- **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) 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).

- **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).

- **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.