MB&B 102 – Science Information Literacy – Syllabus

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By appointment Hours Conference Room

Description:

"We can see now that information is what our world runs on: the blood and the fuel, the vital principle. It pervades the sciences from top to bottom, transforming every branch of knowledge."

- James Gleick, The Information: A History, A Theory, A Flood, p. 8

We live in the Information Age. Advances and changes in technology and computing have radically changed how we work with information of all kinds: how we communicate, how we do research, how we read and how we learn. Our ability to find information on any topic has expanded so radically that comparing it to our ability even 20 years ago is useless. Accompanying this, however, is an increasing difficulty to understand the provenance, the purpose, the credibility and the usefulness of information. In short, a new set of skills are needed for the scientist in the 21st century: being information literate.

Goals:

Students in this course will learn to:

- determine the nature and extent of information needed
- acquire needed information effectively and efficiently
- evaluate information and its sources critically
- use information effectively to accomplish a specific purpose

Students will also examine the economic, ethical, legal, and social issues surrounding the use of information and how information literacy is important to lifelong learning and keeping current to new developments in his/her field.

An Explanatory Note:

This is the first iteration of this course and, as such, the course is still under development. This syllabus represents the general outline for the course, but many specifics (readings, assignments, the order of topics covered) have yet to be finalized and may be changed as the semester goes on. If you are a person who prefers to know exactly what they're getting into, this may not be an ideal experience for you. If, on the other hand, you thrive on the unexpected, this might be right up your alley.

Please refer to the course page on Moodle 2 (http://moodle2.wesleyan.edu/) for all other details regarding the class schedule, readings, assignments, etc.

Text:

Badke, W. (2011). Research strategies: finding your way through the information fog (4th ed.). Bloomington, IN: iUniverse, Inc.

Additional Readings (selections from which TBA):

Borgman, C. L. (2007). Scholarship in the digital age: information, infrastructure, and the Internet. Cambridge, Mass.: MIT Press.

Carr, N. G. (2010). The shallows: what the Internet is doing to our brains. New York: W. W. Norton. Morrison, H. G. (2009). Scholarly communication for librarians. Oxford: Chandos.

Pariser, E. (2011). The filter bubble: what the Internet is hiding from you. New York: Penguin Press. Rheingold, H. (2012). Net smart: how to thrive online. Cambridge, MA: MIT Press.

Weinberger, D. (2011). Too big to know: rethinking knowledge now that the facts aren't the facts, experts are everywhere, and the smartest person in the room is the room. New York: Basic Books.

Expectations and Class Policies:

- Attendance/Participation. Class attendance and punctuality are of critical importance. This is not a lecture course there will be active discussion and interactive learning for nearly every class session and your absence will be keenly felt. Your attendance is required for every class session, except for planned absences and/or illness. Absence will result in a zero grade for that week's participation and attendance, with the following exceptions: Planned absences must be discussed with the instructor at least 48 hours in advance, and illness must be accompanied by a note from the Health Center.
- <u>Grading.</u> Letter grades will be assigned as detailed in Wesleyan's Academic Regulations. There will be no extensions given for any assignment, except in the case of a medical or personal emergency supported by a note from your class dean.
- Honor Code and Plagiarism: Please be sure you have read and understood the section in the current Student Handbook describing the Honor Code and Plagiarism. As what constitutes plagiarism will be a topic of discussion in the course itself, it nonetheless bears mentioning that all work submitted and all exams/quizzes taken will require your affirmation of the following Pleage, as applicable:
 - For papers and similar written work: In accordance with the Honor Code, I affirm that this work is my own and all content taken from other sources has been properly acknowledged.
 - For tests and other academic exercises: In accordance with the Honor Code, I affirm that this work has been completed without improper assistance.
- Any suspected violations of the honor code will be reported to the Honor Board. Students
 found in violation of the Honor Code are subject to sanctions at the discretion of the Honor
 Board, up to and including, suspension or dismissal from the University.
- <u>Class etiquette</u>. The classroom will be held in a computer lab, so you will be sitting in front
 of a computer for much of your class time. This is not an invitation to use the computer for
 activities outside the scope of the class, including but not limited to: checking your e-mail,
 Facebook, the ACB, Wesleying.org, playing games, surfing the web, chatting with friends,
 watching Youtube videos, or updating your Tumblr. Your attention to class discourse (or
 lack thereof) will be noted and reflected in your participation grade.

Assignments/Evaluation:

- Research Journal/Portfolio: a collection of evidence, reflection and products from the process of researching and producing a research assignment (40% of grade)
- Final Exam(5% of grade)
- Other assignments: exercises, reading responses, etc. (35% of grade)
- Class participation and attendance (20% of grade)

General Course Schedule:

Week	Торіс	Required Reading
1: Sept 7	No class: pre-test and survey online	
2: Sept 14	Introductions / The nature of scientific information	Weinberger, Too Big to Know, Chapter 2 Subramanyam, Characteristics
3: Sept 21	Structure of scientific information and publishing	and Structure of Scientific Literature Morrison, Scholarly Communication, chap. 1-3
4: Sept 28	Topics in scholarly communication: open access	Morrison, Scholarly Communication, chap. 6
5: Oct 5	Information needs and the research process	Badke, Research Strategies, chapter 2 (pp. 19-39)
6: Oct 12	Search strategies and syntax	Badke, Research Strategies, chap. 3 & 4(pp. 42-60 66-85)
7: Oct 19	Where to look: web searches, databases, etc.	Badke, Research Strategies, chap. 5, pp. 89-118
8: Oct 26	Finding and accessing library material / Field trip to Science Library	
9: Nov 2	Managing your information: EndNote	
10: Nov 9	Evaluating information	Rheingold, Net Smart, chap. 2
11: Nov 16	Ethical and legal issues: copyright, plagiarism	Blum, My Word!, chap. 2
12: Nov 23	NO CLASS	THANKSGIVING BREAK
13: Nov 30	Issues with online information I	Pariser, Filter Bubble, TBD
14: Dec 7	Issues with online information II	Carr, The Shallows, chap. 7