

### \*\*\* Course Overview \*\*\*

## INFO 105: Information Evaluation, Organization and Use Spring 2009, Prof. Gerry Stahl

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This course uses Blackboard as an online space for course materials, discussion and assignments. Your course Blackboard space is available at: <http://drexel.blackboard.com>

This *Course Overview* may be modified periodically. The latest version is always available at: <http://www.cis.drexel.edu/faculty/gerry/teaching/spring09/overview105.pdf>

### Course Description

INFO 105 provides an introduction to the users of information systems and the information resources that can be accessed through these systems. Users are considered in terms of their information needs, communication and information seeking behavior, and information processing capabilities. Print and electronic information resources are considered in terms of both their content and structure.

The course does not assume any special background or skills. The course will not involve any programming.

When you have completed this course, you should be able to:

- Recognize and describe the general processes of knowledge acquisition, integration, and retention.
- Recognize the role that human language and communication plays in the development of users' mental models and in the design of information systems and information resources.
- Express differences in users' information needs and in their information seeking behavior.
- Explain why requirements analysis is an important component of resource selection and system design.
- Demonstrate the principles for evaluating information resources and the key choices that affect usefulness of resources from the user's point of view.
- Describe how classification and indexing systems are designed to provide access to information resources.
- Recall the basic principles of the design of controlled and uncontrolled vocabularies for information retrieval.
- Search print and electronic resource collections and compile a carefully selected and annotated set of exemplary resources on a particular topic.

The course this quarter is centered on selected classic and contemporary readings on core issues of information science, like how people know. How do people use information, evaluate it, organize it, make sense of it and share it? The readings review the history of theories of information, knowledge and thought from idealism, rationalism, empiricism, behaviorism, cognitivism and post-cognitivism. These theories are closely related to the design of software to support human knowing, learning, questioning, browsing and searching. The readings conclude with current theories, techniques and technologies for using and sharing information.

## Course Approach to Learning

This course will engage in *collaborative learning*. You will learn primarily by reading, sharing your thoughts on the readings with others in the class and working on a group term project.

The course is conducted collaboratively: most of your learning will be from interaction with other students in the class. The group work will be organized and conducted by you and the other students. The readings will be discussed by you and your classmates; the readings and student critiques will largely take the place of lectures. By participating actively in the course, you will learn much more than by passively observing lectures.

## Course Schedule

The main reading assignments are from the readings listed below. The readings can be downloaded from Blackboard course materials. There will be weekly assignments—mostly steps in the group project. All assignments are due by midnight Monday night.

Week	Dates	Readings	Group and Individual Assignments
1	March 30 – April 6	KNOWLEDGE, INFORMATION, BEHAVIOR Plato, Weaver/Shannon, Chomsky	Individual assignment: Describe your group's information system
2	April 6 - 13	DATA, ARTIFACTS Bush, Boulding, Latour	Describe the functionality of your group's information system
3	April 13 - 20	UNDERSTANDING Winograd Part I	Conduct a literature search about the system in popular press
4	April 20 - 27	COMPUTATION Winograd Part II	Individual assignment: Midterm Reflection Paper
5	April 27 - May 4	COMPUTERS & PEOPLE Turing, Searle	Develop an annotated bibliography of your system in the research literature
6	May 4 - 11	STUDYING INTERACTION Zhou, Cakir	Individual assignment: Contribute to your group's information system
7	May 11 - 18	SOCIAL INFORMATICS Kling, Stahl, Peters	Discuss the limitation of your system
8	May 18 - 25	WEB 2.0 USERS Forte, Beschastnikh, Lampe, Nardi	Propose an innovative and useful new function for your system
9	May 25 - June 1	SEARCHING & BROWSING Bates, Kuhlthau, Twidale	Individual assignment: Final Reflection Paper
10	June 1 - 4	INFO BEHAVIOR Belkin, Chatman, Krikelas, Chi	Final report on your group project

## Course Requirements

**READINGS:** Every week read the assigned readings carefully. For the first week, read the Plato and Chomsky selections and Weaver's popularization of Shannon—refer to the original by Shannon to see the role of the mathematical analysis. For general background, look up the historic authors in Wikipedia: Plato, Claude Shannon, Noam Chomsky and B. F. Skinner. For later weeks, look up Vannevar Bush, Kenneth Boulding, Terry Winograd and Bruno Latour. By **midnight on Sunday**, post **reviews** of each of the readings for the preceding week in the course Blackboard discussion. Be concise and to the point: your reviews should each be 200-400 words long; they should state the main points or arguments of the reading and should point out its value and its limitations. Be creative and critical in your reviews. Before class, read the reviews by other students and come to class prepared to discuss the readings and the reviews.

**INDIVIDUAL ASSIGNMENTS:** Individual assignments are due at the end of weeks 1, 4, 6 and 9. They should be uploaded to the Blackboard Drop-box by **midnight on Monday** at the end of the course week. Save your paper in Word format, using your last name and the week number as the file name, e.g., *stahl4.doc*.

*Week 1. Describe your group's information system.* Submit a written document of about one single-spaced page (500-600 words), describing the information system that your group will be studying. What is its purpose, its history, its structure, its content, etc.? Due in the Blackboard drop-box midnight, Monday, April 6.

*Week 4. Midterm Reflection Paper.* Submit a written document of about one single-spaced page containing your reflections on the course so far and expectations for the rest of the course. Due in the Blackboard drop-box midnight, Monday, April 27.

*Week 6. Contribute to your group's information system.* Interact with your group's information system in some meaningful way, such as contributing new information to it if possible. Submit a written document of about one single-spaced page reporting on what you did, how you did it and why you did it that way. Due in the Blackboard drop-box midnight, Monday, May 11.

*Week 9. Final Reflection Paper.* Submit a written document of about 3 single-spaced pages containing your reflections on the course. This should be a reflection from your personal, individual perspective on how you felt the course met your needs or fell short. This is an opportunity to provide meaningful feedback to the instructors. You should demonstrate what you have actually done in the course and what you have learned. Discuss how the readings fit together and the overview you gained of information systems from the readings. What did you learn about information systems from your group project and the reports of other groups? Discuss what your group could do if it had another ten weeks to work on its project. Due in the Blackboard drop-box midnight, Monday, June 1.

**GROUP PROJECTS:** Every student will be in a small group of 3 to 5 students for the quarter. The groups will each explore an information system, such as (a) Wikipedia, (b) Goggle Scholar, (c) Cite-U-Like, (d) Del.icio.us, (e) political blogs, (f) the Internet Public Library, (g) the Drexel Hagerty Library, (h) FaceBook or (i) You Tube. Collaborate actively in your project group. Participate fully in all group assignments. You are responsible for making your group a successful collaborative experience in which everyone participates, contributes and learns. In weeks 2, 3, 5, 7, 8 and 10, work on that week's phase of the course project and post a group report. A group **report** on the week's assignment must be posted to the Blackboard wiki by **midnight Monday**. Your group will use the wiki posting to report on its work in class.

Week 2. System Functionality. Work together as a collaborative group to analyze the major *functionality* that your system provides for users to work with information. Post a wiki entry describing the functionality of the system your group is studying. Discuss the design of this functionality. At the top of your entry on the wiki page for this (and every subsequent) week give the name of your group and list the students who actually worked together on writing the entry.

Week 3. Literature Search. Conduct a literature search of *non-technical sources* that discuss your information system. Post a wiki entry summarizing what you learned from the sources you found. Cite your sources using APA format (see <http://www.liu.edu/cwis/cwp/library/workshop/citapa.htm>). Rate the quality, helpfulness, breadth, depth and reliability of your sources and of the search as a whole.

Week 5. Annotated Bibliography. Conduct a literature search of *research sources* that discuss your information system. Post an annotated bibliography summarizing what you learned from the sources you found. Rate the quality, helpfulness, breadth, depth and reliability of your sources and of the search as a whole.

Week 7. System Limitations. Discuss what your group feels are the most serious *limitations* of your information system. Consider what an ideal information system with similar goals might provide.

Week 8. Innovative Function. Propose an innovative *new* functionality that your group would like to see added to your information system. Discuss your design rationale for this functionality.

Week 10. Final Report. Post an *executive summary* of your group project, reviewing what you did and what you learned. Include your assessment of the information system and any recommendations. Support your discussion with citations to papers you read this quarter.

## Course Bibliography

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- Lampe, C., & Johnson, E. (2005). *Follow the (slash) dot: Effects of feedback on new members in an online community*. Paper presented at the Group '05.
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## Course Grading

There are no tests in this course. We are not interested in your test taking skills, but in your ability to design and critically analyze interactive systems, to build innovative ideas and to share your skills by working with other people. You should be able to assess your own accomplishments and those of your team by comparing them with other team efforts. Your grades on assignments will be posted in Blackboard.

Grading will be based:

- Partially on your individual participation in the class and in your group.
- Partially on the work of your project group on the group assignments.
- Partially on your submitted individual assignments.

- Partially on your reviews of the readings.

Grading is *not* curved: it is possible for all groups and even all individuals to earn an A in this course. Most students who take an honest interest in the course and exert reasonable effort in *all* aspects of the course can receive an A. Failure to do your share in your group work, to do the reading or to submit acceptable written assignments by the deadline will lower your grade. Because groups all report their work frequently, you can evaluate for yourself how your group is doing compared to the other groups. Your submitted papers will clearly reflect how well you have worked and learned individually. Assume that your grade will be an accurate measure of what your group and you have accomplished in this course.

70%	Individual		A+	98	100
	40%	Reviews of readings	A	92	97
	20%	4 individual assignments	A-	90	91
	5%	Participation in group	B+	88	89
	5%	Participation in class	B	82	87
30%	Group		B-	80	81
	30%	6 group assignments	C+	78	79
			C	72	77
			C-	70	71
			D+	68	69
			D	62	67
			D-	60	61
			F	0	59

## Generic Information

**Problems & Questions.** The best place to raise questions is in class because other students may have the same question and they can benefit from seeing the answer; also other students can respond with their views on the issue. If it is an urgent or personal problem, email the instructor. If you believe that your group assignment is not going to work out, discuss it with the instructor. Email with the instructor is the best medium for confidential concerns, such as concerns about other students in your group or personal events that will interfere with your course work. Please email the instructor(s) to arrange for a meeting or office hours.

**No Excuses.** No one is interested in excuses. If you need to miss any group activity, such as a group meeting or a group presentation in class, notify the other members of your group as soon as possible and explain how you will contribute to the group. You are responsible for doing your share of the group work during the term; when you ask others to cover for you, let them know how you will make up for it. Everyone knows that things come up, sometimes unexpectedly, but that does not relieve you of your responsibilities. Your group is your support system in the course—let them know what is going on so they can help you.



**Plagiarism.** Obviously, plagiarism is not tolerated at Drexel and can result in failure. Plagiarism is passing off someone else's ideas, work or words as your own. Collaboration is encouraged, but always give credit to individuals or groups whose ideas, work or words you are reporting, quoting or summarizing.

**Academic Honesty.** Cheating, academic misconduct, plagiarism, and fabrication are serious breaches of academic integrity and will be dealt with according to University Policy (Section 10 of the Student Handbook). Students are responsible for their own finished work. Penalties for first offenses range from 0 on an assignment to an F in the course. All offenses are reported to the University Office of Judicial Affairs.

**Late Policy.** All group assignments are due online by midnight of the due date. Group presentations cannot be rescheduled. Individual written work is due by midnight of the due date. *Grades for late written work will be lowered substantially.*

**Student Advisors and Resources.** Take advantage of the academic advisors who are available on the third floor of Rush. Appointments with advisors can be scheduled by calling 215-895-2474. Appointments with co-op coordinators can be scheduled by calling 215-895-2185. The Drexel Learning Center is available at <http://www.dlc.drexel.edu>. The Writing Center is available at <http://www.drexel.edu/writingcenter>. The Hagerty Library is available at <http://www.library.drexel.edu>.

**Special Needs Students.** If you have any special need that must be accommodated, please let the instructor know the first week of class. Contact with the Office of Disability Services (215-895-2506/7) is strictly confidential.

## Privacy Notice

In general, all work and communication in this course should be treated as *public*:

- Your work in this course may be studied by other students in the course.
- Any communication on the Internet may end up being seen by people for whom it was not originally intended.
- The web spaces for this course can be viewed by anyone in the world through the Web.
- ISchool courses may be recorded and streamed for educational purposes. Presentations and other activities in class may be videotaped and made available in the future.
- The instructor and other Drexel faculty, students and staff may have access to anything in Blackboard or other web spaces.
- Future researchers may have access to these materials as data. Although they do not have permission to publish any data about you specifically and although they should ensure anonymity and confidentiality of all personal data, you should assume that activities taking place in this course may be subject to viewing.
- Students in future courses may have access to your work, particularly the group designs.

Please let the instructor know if you have an objection to your work being made available to others.

## Instructor's Background

Hi. My name is **Gerry Stahl**. I am always available by email at [Gerry.Stahl@drexel.edu](mailto:Gerry.Stahl@drexel.edu).

Send me an email if you want to meet with me in person or to inquire about urgent or personal questions. It is often better to ask questions about the texts, weekly assignments or other aspects of the course in class, so that everyone in the class can see and respond to your questions and their answers.

My professional research area is the field of CSCL (Computer-Supported Collaborative Learning). I think that collaborative learning is an exciting and especially effective way to learn. I believe that there is great potential to design good computer support for it. I have been experimenting with a number of CSCL prototypes and have written many papers on the theory, design and evaluation of interactive systems to support collaborative learning. We will be taking advantage of what I have learned from my research in this course, and I hope you will benefit from this.

I have recently published a book on CSCL entitled *Group Cognition: Computer Support for Building Collaborative Knowledge* and have launched the *International Journal of Computer-Supported Collaborative Learning*. My background is in computer science and philosophy. At Drexel I teach mainly HCI courses; before coming to Drexel I worked at a large research organization in Germany; before that I was a Research Professor at the University of Colorado in Boulder. The 2002 international CSCL conference was at Boulder and I was the Program Chair for it; I have been in charge of workshops at CSCL 2003 in Norway, CSCL 2005 in Taiwan, CSCL 2007 in New Brunswick and CSCL 2009 in Greece.

Let me know if you have any questions about my background or check out my home page, where you can see more details and read my papers: <http://www.ischool.drexel.edu/faculty/gerry>.