Summer 2008: Meets in WebCT on Tuesdays and Thursdays from July 10 to August 11th, 6:00 to 9:45 p.m. (The class time provides a time frame to post answers and/or necessary class materials of each week. You will need to post your assignments by the designated class time without a deduction from your grade. You do not need to be at your computers during the designated class-time).

Instructor: Dr. Yan Ma, Professor
Voicemail: 401-874-2819 (O) ; 401-419-8487 (Cell)
Fax: 401-874-7095
Email: yanma@hawaii.edu
Office: Virtually in WebCT
Office hours: By email via WebCT

Course Description
An introduction to the interdisciplinary study of visual information science related to visual information (data) collection, analysis, processing, transmission, utilization, and communication with emphasis on psychological, social, and cultural aspects of visual information in modern and digital libraries and information centers.

Prerequisite: LIS 601 and LIS 605 or permission from the instructor.

Core Competencies Addressed
• Knowledge accumulation—education and lifelong learning
• Knowledge inquiry—research
• Social, Historical, and Cultural Context
• Knowledge Dissemination--Service

Program Learning Objectives Addressed
This course addresses the following objectives of the LIS Program enabling students to

• Apply basic competencies and knowledge that are essential for providing, managing, and designing information services in a variety of information environments.
• Apply basic competencies and knowledge that are essential for providing, managing, and designing information services and programs in a variety of information environment
• Demonstrate an understanding of the development and interrelationship of librarianship and information science.
• Demonstrate an understanding of research techniques and methods of applying new knowledge as it becomes available.
• Demonstrate the professional attitudes and the interpersonal and interdisciplinary skills needed to communicate and collaborate with colleagues and information users;
11. Demonstrate basic competencies in the latest specialized information technologies;
12. Demonstrate an understanding of the above goals within the perspective of prevailing and emerging technologies.

In addition, professor incorporates her research findings in the course.
Professional Expectations

All students in the Program are expected to become familiar with and adhere to the Professional Expectations posted at http://www.hawaii.edu/slis/students/profexp.html

Course Objectives

1. Study the nature of information in textual and visual forms.
2. Study the interdisciplinary nature of visual information science.
3. Study information and visual information and communications theories.
4. Understand and analyze needs and uses for both textual and visual information. User information seeking behavior for both textual and visual information.
5. Discuss information policy, intellectual property, and copyright for both textual and visual information.
6. Understand the theory and practice of information storage and retrieval systems for both textual and visual information.
7. Understand and study issues relating to user interface design.
8. Explore information technology for visual information science
9. Study bibliometrics and other research methods for textual and visual information.
10. Become familiar with important journals, books, and authors in visual information science.

Teaching Method

Based on my teaching philosophy that the most effective learning is inquiry-driven, student-centered, situation-based, teaching methods will include:

- Write critiques in response to assigned readings
- Post critiques and response papers to the WebCT Discussion List for the class to respond.
- Develop critical thinking skills by writing response papers to the guided questions and analyzing assigned works.
- Respond to the focused questions posted by the instructor.
- Provide innovative ways to build strong discussions for the weekly topics covered in class.

Research Methods

The following research methods and theoretical foundations are incorporated in assignments: Information retrieval, content analysis, instructional design, critical and cultural analysis, structural and poststructural analysis of texts, and visual cognition studies.

Requirements

Read assigned readings; participate in discussions, such as analyze, critique, and synthesize the readings; and complete assignments as instructed. A final term paper will be your choice of a topic relating to visual information science. Confer with the instructor on your topic.
Course Requirements and Grading Policy

- 2 Definition papers: 15%
- 7 Responses to the Readings (1-2 pages): 35%
- Mode of information report: 15%
- Online Postings and Discussions: 10%
- Final Project: 25%

<table>
<thead>
<tr>
<th>Assignments</th>
<th>%</th>
<th>Post before 6:00 p.m. on</th>
<th>Individual</th>
</tr>
</thead>
<tbody>
<tr>
<td>What is Information?</td>
<td>5%</td>
<td>July 15 (Session 2)</td>
<td>x</td>
</tr>
<tr>
<td>What is Visual Information?</td>
<td>10%</td>
<td>July 17 (Session 3)</td>
<td>x</td>
</tr>
<tr>
<td>Mode of Information report</td>
<td>15%</td>
<td>July 29 (Session 6)</td>
<td>x</td>
</tr>
<tr>
<td>#1 Response to the Readings on visual information seeking</td>
<td>5%</td>
<td>July 24 (Session 5)</td>
<td>x</td>
</tr>
<tr>
<td>#2 Response to the Readings on interface design</td>
<td>5%</td>
<td>July 29 (Session 6)</td>
<td>x</td>
</tr>
<tr>
<td>#3 Response to the Readings on organizing visual information</td>
<td>5%</td>
<td>July 31 (Session 7)</td>
<td>x</td>
</tr>
<tr>
<td>#4 Response to the Readings on communication theory, perception, perceptual aesthetics</td>
<td>5%</td>
<td>August 5 (Session 8)</td>
<td>x</td>
</tr>
<tr>
<td>#5 Response to the Readings on visual cognition</td>
<td>5%</td>
<td>August 5 (Session 8)</td>
<td>x</td>
</tr>
<tr>
<td>#6 Response to the Readings on meaning and interpretation of visual information, cultural, social, and ... of visual information</td>
<td>5%</td>
<td>August 7 (Session 9)</td>
<td>x</td>
</tr>
<tr>
<td>#7 Response to the Readings on visualization of information, information design</td>
<td>5%</td>
<td>August 7 (Session 9)</td>
<td>X</td>
</tr>
<tr>
<td>Final project</td>
<td>25%</td>
<td>August 11 (Session 10)</td>
<td>x</td>
</tr>
<tr>
<td>Presentation and Discussion</td>
<td>10</td>
<td>Every Week</td>
<td>x</td>
</tr>
</tbody>
</table>

Required Textbooks:

Moore, David and Dwyer, Francis. (1994). Visual Literacy: A Spectrum of Visual Learning. Englewood Cliffs, NJ: Educational Technology Publications. (Required. I will send the copy to the EMA Copy Center to make copies. It is not in print any more. Students have to buy it in the EMA Copy Center)


Recommended Textbooks:


**Articles on E-Reserve at the Sinclair Library**


Visual Literacy in an Information Age (pp. 235-239), Blacksburg, VA: The International Visual Literacy Association.


Resources

| International Visual Literacy Association  |
| http://www.ivla.org/ |
| Visual Literacy Bibliography:  |
| http://www.ivla.org/bibliography/intro.htm |
| The Human-Computer Interaction Laboratory at the University of Maryland  |
| http://www.cs.umd.edu/projects/hcil/ |
| Information Visualization Resources on the Web  |
| http://www-graphics.stanford.edu/courses/cs348c-96-fall/resources.html |
| Atlas of Cyberspaces  |
| http://www.cybergeography.org/atlas/atlas.html |
| Guides to Quality in Visual Resources Imaging  |
| http://www.rlg.org/visguides/ |

Technology Requirements

In order to successfully take this WebCT course, you need to following software, hardware, and your ability to complete all class assignments:

1. Computer access either at home or on UH campus or in a public library or by other means.
2. High speed Internet access.
3. Updated virus protection software on your computer.
4. Your ability to use WebCT functions of posting messages in Discussion List, Email, and attaching a file.
5. Your ability to scan a file or a picture to send to the class in WebCT.
6. Your ability to find, analyze, use appropriate professional and free Internet resources.
7. Present your assignments and share your findings in visually meaningful ways in digital form.

You can finish your projects in any computer labs on campus or at home.

- Computing and Internet Support at UH: http://www.hawaii.edu/its/
- Free Virus Protection Software for UH Students and Faculty: http://www.hawaii.edu/antivirus/
- Downloading shareware at UH: http://www.hawaii.edu/askus/575
GUIDELINES FOR ASSIGNMENTS

*** Please download and scan your attachments before you post them to WebCT. If you send a virus file to the class, you will lose total grade.

Submission: Please send me your assignment through WebCT “Discussion” box. It is important for all of you to share your Responses to the Readings. Please first type and save Responses a Word file and then use copy and paste functions to post your papers the Discussion box in WebCT using the subject title “Response #1.” For example, Response to Readings #1 needs to be posted in the Topic box labeled as “Response #1.” Post your ideas, thoughts, and other discussion responses to the appropriate Topic box in WebCT "Discussion” box. For example, submit your discussion responses for Week 2 in the Topic box labeled as "Discussions--Week 2". Tip: you may hold on “Ctrl” and “V” key together to paste the text to the mail message box. If you send an attachment with visuals, please SCAN your file before posting it to WebCT.

All graded papers and postings will go to WebCT Discussion Tool. It is an open class to share ideas and creative thoughts. The instruction will respond to you privately with comments or openly to the Discussion Tool.

Detailed instruction of each assignment is available via the Web syllabus and WebCT.

Final Project: Write a paper of no less than 15 pages to explore one of the following topics that we have discussed in class. If you choose a topic not listed below, a short conference about your proposed topics is required.

Or, you can a project that enables us to visualize information better, to improve the present information system, to solve a problem by using the theories and principles learned in class. A short conference about your proposed topics is required.

1. How visual information has played a role in this information age? In what aspects?

2. Visual communication theory or model(s)

3. Information policy or intellectual property rights for visual information

4. Visual information rich or poor. Or, visual information literate vs. illiterate.

5. Visual information seeking behavior

6. Cultural Differences in Interface Design

7. Visual vs. textual information storage and retrieval

8. Can traditional cataloging and indexing principles still be used to process/organize visual information? How?

9. Visual information and communication theory, perception, and perceptual aesthetics


11. Meaning construction and visual information
Ma—LIS 694 Visual Information Science

12. Information design and visual information

13. Digital libraries and visual information

14. Digital museums and visual information

15. Visual Information Literacy

For all papers:

Write clearly, using good grammar and spelling;

Adopt one reference style and be consistent. Sample style manuals:


Type or word-process the paper (double spaced).

Course Schedule

Session 1
( July 10)

Introduction to the Course
Nature of Information

Assignment: View PPT Lecture of "Information"

A two-page paper on What Is Information?

Discussion questions:
1. Why is information so difficult to define?
2. What are the characteristics of information?

Session 2
( July 15)

Interdisciplinary Nature of Information Science
The Information Profession
The Information Society/The Information Age

Present and Post your first exercise to WebCT.

Readings: Rubin’s Chapters 2-3.

Assignments: View PPT Lectures of "Information Science" and "Visual Information Science";

Finish required readings. Work on the paper of "What is Visual Information?"

Discuss these questions in WebCT. You can address all the issues in one discussion or address of one the major issues. But whatever you are going to discuss will need to be focused on the last question #6.

1. Discuss Marcia Bates’ article. “in information science, we study the process in service of information transfer.” (p. 1048). Bates’ three BIG questions: a) the physical question: What are the features and laws of the recorded-information universe? b) the social question: How do people relate, seek, and use information? c) the design question: How can access to recorded information be made most rapid and effective?

2. (Rubin) What will new technologies affect the mission of libraries?

3. How will electronic publications and information be evaluated and selected?

4. How will access to electronic information be provided, controlled, and paid for?

5. How does technology affect the employees of the organization, and how can it be implemented for maximum productivity?

6. (Ma) How visual information has played a role in this information age? In what aspects?

---

Session 3
(July 17)

**Visual Literacy**

**Visual Information**

**Visual Information around Us**

Work on your project of “Mode of Information” Report

Post to WebCT your two-page paper on What is Visual Information?


Assignment: View PPT Lectures of "Visual Literacy"; "Icons--Semiotic Analysis";

"Icons--Semiotic Analysis (Homepages)", and "Icons--US Library--Homepages"

Work on a Mode of Information report.

---

Session 4
(July 22)

**Information Theory**

**Intellectual Property Rights**

**Information Policy Issues**

Readings: Rubin’s Chapters 4-5, 8; Moore’s Chapter 5


Assignments: View PPT Lectures of "Information Policy" and "Bibliometrics". Finish all readings. Pay attention to how information policy or intellectual property rights are covered for information other than textual information.

Finish all readings. Pay attention to how information policy or intellectual property rights are covered for information other than textual information.

Discussion questions: (You can use Discussion questions to help you focus your paper)

- What is (are) visual communication theory or model(s)?
- What is the noise in visual communication?
- What are the current information policy or intellectual property rights for visual information?

Session 5
(July 24)

**Information Needs and Information Seeking**

**Information Rich and Poor**

**Nonverbal Communication**

Readings: Readings: Moore’s Chapter 9


Assignment: View PPT Lectures of "Users" and "Mode of Information--Fax"

#1 Response to the Readings on visual information seeking is due to be posted in WebCT.

Prepare one or more examples of how you or your patron(s) seeks verbal or visual information.

Write down your example(s) in no more than one page. Post your Response to WebCT.

Discussion questions: (You can use Discussion questions to help you focus your paper)

1. How do we define visual information rich or poor? Or, visual information literate vs. illiterate?

Can someone be visually rich, but not visually literate?

Back to Class Schedule

Session 6
(July 29)

Post your “Mode of Information” report to WebCT.

**Communication models.**

**Organization of Information**

**Information Retrieval Systems: Indexing**

**Information Retrieval Systems: Electronic Sources**

Readings: Moore’s Chapters 10, 13


Assignment: View PPT Lectures of "Information Representation"; "Indexing"; "Inverted Files"; and "Icon Indexing".
#2 Response to the Readings on interface design is due to be posted in WebCT. Each of you will need to find one most current quality article on the topics of today’s session. Share your summary with your classmates. Post your citation or URL to the class WebCT. Prepare one good or one poor example of interface design of an information system. Post your examples in WebCT. We may have a discussion on Cultural Differences in Interface Design with students from another institution.

Session 7
(July 31)

Organization of Information
Information Retrieval Systems: Searching
Information Retrieval Systems: Controlled Vocabulary
Readings: Rubin’s Chapter 6
"Revealing Things" The Smithsonian's Virtual Exhibit (note the interactive spider display to move from subject to subject!)
http://www.walkerart.org/salons/shockoftheview/space/disalvo/revealingthings.html
http://www.walkerart.org/salons/shockoftheview/space/disalvo/index.html

Assignment: View PPT Lectures of "Information Retrieval" and "Controlled Vocabulary".

#3 Response to the Readings on organizing visual information is due to be posted in WebCT. Prepare one or more examples of how textual and visual information is organized. For example, how do we exercise “Controlled Vocabulary” for textual or visual information? Write down your example(s) in no more than one page. Post your examples to WebCT.

Back to Class Schedule

Session 8
(August 5)

Communication Theory
Perception
Perceptual Aesthetics
Readings: Moore ‘s Chapter 2,5,7
Assignments: View PPT Lectures of "Perception"; "Media and Race"; "Manikins".

#4 Response to the Readings on communication theory, perception, and perceptual aesthetics is due. How can you apply these principles from the readings to your work or class projects or research? You can also cite examples from LIS field or other fields to demonstrate how these principles are used appropriately or inappropriately. Post your experience or example(s) in WebCT.
Ma—LIS 694 Visual Information Science

Visual Cognition
Images and Imagery Theory
Readings: Moore’s Chapters 3-4
Assignment: View PPT Lectures of "An Analysis of the Film "Crouching Tiger, Hidden Dragon" and Fill out the "Survey of CTHD".
#5 Response to the Readings on visual cognition is due. Prepare one or more examples of how visual cognition has played a role in information seeking, information storage and retrieval, etc. Write down your example(s) in no more than one page. Post your examples in WebCT.
Discussion questions: (You can use Discussion questions to help you focus your paper)
1. How visual cognition plays a role in human information processing? Information retrieval? Information seeking?

Session 9
(August 7)
Meanings and Interpretations of Visual Information
Cultural, Social, Political, Technological Aspects of Visual Information
Readings: Moore’s Chapters 16-21
Assignment: View PPT Lectures of "A Book from the Sky" and "Code of Chinese Characters"
#6 Response to the Readings on meaning and interpretation of visual information, cultural, social, and technological issues of visual information is due. Prepare one or more examples of how meanings are constructed and interpreted in information systems, in information seeking process, in interface design, etc. Write down your example(s) in no more than one page. Post your examples to WebCT.
Discussion questions? (You can use Discussion questions to help you focus your paper)
1. Is meaning constructed/encoded by the author/designer/producer?
2. Is meaning created by the reader/user/viewer?

Session 10
(August 11)
Visualization of Information
Information Design
Readings: Moore’s Chapters 14-15 (Moore’s Chapters 16-21 from last session if you need more time to finish readings them).
Assignment: #7 Response to the Readings on visualization of information and information design is due. Prepare one or more examples to illustrate how information is well/poorly designed. Or, you may prepare one or more examples of visualization of information in our field. Post your examples in WebCT.
Some suggested articles:
Rune Petterson’s and his articles and book on Information Design:
http://www.idp.mdh.se/personal/rpn01/
Rune Pettersson's published papers:
http://www.idp.mdh.se/forskning/publikationer.asp

Rune Petersson's Book on Information Design published by John Benjamins Publishing company:
http://www.benjamins.com/cgi-bin/t_bookview.cgi?bookid=DDCS%203

Visit the following sites. For any site of your choice, What is “attractive” about the site? What is useful in the site?

Information Design sites:
http://www.dove-tail.com/
http://flow.dreamhost.com/
http://www.sapient.com/
http://www.frankwords.com/
http://www.somepig.com/

Digital Libraries and Museums
Assignment: View PPT Lectures of "website Design Study"; "Digital Libraries"; "Digital Museums"; and "Tiananmen Square Incident Digital Museum".
Find a digital library or a digital museum of your choice and share it with your classmates in WebCT. Use the theories and principles learned in this course to illustrate how the library/museum was designed from your point of view.

Final Project Presentations in WebCT

Final project is due today.