THE UNIVERSITY OF BRITISH COLUMBIA

iSchool (Library, Archival & Information Studies)

Faculty of Arts

We acknowledge that we are on the traditional, ancestral and unceded territory of the hən̓q̓əmin̓əm̓ speaking Musqueam people.

iSchool Mission: Through innovative research, education and design, our mission is to enhance humanity's capacity to engage information in effective, creative and diverse ways.

INFO 200 Foundations of Informatics: How information shapes our lives (3)

Program:	BA Minor in Informatics
Year:	
Course Schedule:	Tuesday and Thursdays, 2:00-3:30 PM
Location:	BUCH B-309
Instructor:	Dr. Hannah Turner (she/her)
Office location:	IKBLC 483
Office phone:	604 827 3927
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Learning Management Site:	http://lthub.ubc.ca/guides/canvas/

Calendar Description: This course familiarizes students with informatics by exploring how processes and technologies to store and retrieve information have transformed human societies. Topics include the interplay between sociotechnical structures and information processes and techniques in different domains of human life.

Course Overview:
Informatics is the study and design of information technologies that impact society. The goal of this course is to familiarize students with the area of informatics by exploring how processes and technologies to store and retrieve information have transformed human societies. This foundational course will introduce students to histories, theories, and concepts used to analyze, design and evaluate information objects, activities, systems, and infrastructures in contemporary societies. Emphasis will be placed on the interplay between sociotechnical structures and information processes and techniques (e.g. creation, organization, processing, storing, and retrieval of information) in different domains of human life. Students will apply this knowledge to critically analyze the design of an organizing system and build up proficiency to design automated information processes/technologies in their own disciplines.

Learning Outcomes:

Upon completion of this course students will be able to:

LO1: Analyze the effectiveness of information organization technologies by using key concepts and theories in informatics and information studies

LO2: Explain the role of scientific, social, historical, and technological factors in the development and current state of informatics in different disciplines

LO3: Compare key aspects of the interactions of humans with digital information that are critical to inform the design of supporting technologies

LO4: Analyze real-world examples of application of informatics to address major societal issues such as pandemics, climate change, poverty, misinformation, information privacy and security, etc. by integrating multiple perspectives

LO5: Outline the inner-workings, conceptual logic, design rationale and biases of information organization systems

Course Topics:

- Informatization of life
- Information as infrastructure
- Information organization systems and infrastructure
- Human-information behaviour (HIB)
- The digital self
- Information overload
- Reverse engineering of the design of information organization systems
- Real-world examples of informatics that have transformed human societies

Prerequisites: None

Format of the course:
The course will be a combination of lectures, in-class activities, group discussions and presentations. Participation in class discussions, activities, and engagement with assigned readings is required.

Course Assignments and Assessment:
More detailed assignment descriptions will be available on Canvas.

Assignment Name	Due Date	Weight	Learning Outcomes	Program Competencies
Inventory exercise (Individual).	Inventory: Tuesday, September 20th	10%	LO1 & LO3	1, 4, 5 & 6
Midterm Exam	Thursday, October 20th	20%	LO1 & LO2	1, 3 & 4
Course Project - Reverse Engineering (group assignment) I. Project Plan	Tuesday October 4th	10%	LO3 & LO4	1, 3, 5, 6 & 7
II. Preliminary report	Tuesday November 1st	5%	LO3, LO4 & LO5	2, 3, 4, 5, 6 & 7
III. Final Report	Tuesday November 22rd	15%	LO3, LO4 & LO5	2, 3, 4, 5, 6 & 7
IV. Project Presentation	Thursday November 24th, Tuesday November 29th,	5%	LO5	6 & 7

	Thursday Dec 1st^nd			
V. Presentation Peer Review	During Presentations	5%	LO5, LO3	5&6
Final Exam	Exam Period	30%	LO1, LO2, LO3 & LO4	2, 3 & 4

Course Assignment Descriptions:

Inventory Exercise (10%):

From a list of categories provided in class, you will select one type of information system that you interact with in your daily life. This could be: a public/academic library, a video-streaming service, an online shopping store, a search engine, or a social media site. You will then describe one these systems by answering the following questions:
1. What is being organized in this system?
2. Why is this information being organized?
3. How much is it being organized?
4. When is it being organized?
5. How or by whom, or by what computational processes, is it being organized?
6. Where is it being organized?
7. Who was behind the construction of this system? How did you figure this out?
8. Document how you answered the above questions. Where did you find this evidence? Cite specific web pages and articles.
9. Describe your own actions when interacting with this system and reflect on the positives and negatives of this experience

Pro Tips:
- Use Chapter 12 in Glushko, R. J. 4th edition (2016) as a reference.
- Submit as a PDF to Canvas, 12pt font, Times new Roman.
- Margins no more than 2.54 cm. 2 Pages in length.
- Cite relevant academic literature using the Chicago Manual of Style.

Assessment Criteria
You will be assessed on: 1) Descriptive Quality of Responses to Questions (60%); 2) Formatting and following directions (30%); 3) Creativity and Originality (10%).

Course Project – Project Plan (10%)

In teams of 3-4 you will choose an information organization system to reverse engineer. By reverse engineering, we mean to dissect analytically (and physically if possible) to understand and be able to explain how the system and its different components work to produce its intended informational outputs. The selected information system can be one that is used in their discipline or one of the systems that team members reviewed in their inventory assignment. In 4 pages, your project plan must include a brief description of their term project and create a timeline with details of the anticipated stages and benchmarks marking progress toward the completion of it. The Project Plan should include the following sections:

- *Project Overview*
- *Description* of the target system to be deconstructed

- *Goals and Objectives* of the Reverse Engineering Project
- *Activities and Resources*
- *Timeline and Outcomes ("Deliverables")*

Assessment Criteria
You will be assessed on the how feasible the project is (50%); How closely you have worked as a group and followed directions (30%); The level of originality and creativity demonstrated in the plan (20%).

Course Project and Individual Meeting – Preliminary Report (5%)

In no more than one page, write a narrative of what your team has accomplished so far in your term project, progression on achieving objectives and milestones, the challenges you have encountered and how you have addressed them. It is expected that your team will review this progress report with your TA in a meeting between the TA and the group.

As a group, you will be expected to attend an Individual Meeting with the Professor. It is your responsibility to schedule this meeting during the allotted week.

Assessment Criteria
You will be awarded the 5% if you have completed the report and have followed correct submission directions.

Course Project – Final Report (15%)

For the final report of the Course Project, you will write a short article (2,000 words max) of the process, main products, and outcomes of your project.

It must include:
- *Title of the project*
- *Names of students*
- *Introduction*
- *Description of the reverse engineering process*
- *Description of findings*
- *Critical review* of this information organization system
- *Self-reflection of learning*
- *Images or Graphics*

Assessment Criteria
You will be assessed based on 1) The overall ability to follow directions and the inclusion of all relevant aspects of the report, delegation of group work (30%); 2) the accuracy of the description of the system (20%); 3) the creativity employed in use of images, text, and visualization (10%) 4) The quality of the writing (20%) 5) Use of academic literature to critically assess the system (20%).

Course Project – Project Presentation (5%)

Your team will have no more than 10 minutes to visually (i.e. images, videos, oral presentation, etc.) present your term project to the class. Highlight in your presentation: your targeted system, its

importance, your reverse engineering process, and interesting things that you learned when conceptually (and maybe physically) breaking it apart.

Assessment Criteria
You will be assessed on 1) your ability to convey complex information in a short amount of time (50%) and 2) the use of visual aids (50%).

Course Project – Peer Reviews of Presentations (5%)

You will be individually randomly assigned three presentations to peer review. At the beginning of the presentation classes, you will be given a sheet with space to write questions (or electronically fill out) for each presenter. These are due the next day on Canvas through the Peer Review system.

Assessment Criteria
You will be assessed on the professionalism and level of quality of your constructive feedback.

Midterm Exam (20%)
This is a short answer exam to assess your knowledge of concepts concerning the informatization of life and the understanding of how information is organized, accessed and consumed and key facts from the historical development of informatics in society.

This is a question and answer and multiple-choice exam that will be held at the beginning of class on Thursday October 21st. Questions in the exam will evaluate basic understanding and application of knowledge of material presented in previous lectures and readings, including readings assigned for the test date.

Final Exam (30%)

This is a summative exam that will demonstrate your knowledge of course concepts through short and long essay questions. Responses will be between 300 and 1000 words in length, with a strong focus on content over the entire course. You may be asked to answer definitions, problem solve using case study examples, or respond to questions using readings from class.

BONUS:
Every Thursday Seminar class, there will be an in-class activity you will submit by the end of class, either through canvas or in class. The activities will vary, but you must remember to list your name with each assignment. Complete all 11 of these and you will receive a 1% bonus on your final course grade.

Course Schedule [week-by-week]:

The approximate number of pages of reading that students are required to do in this class every week is 30-40 pages. Some weeks will include audiovisual material that replaces one or both of the textual readings. The expected number of hours for students to prepare the assigned material for each week is no more than 2.

Week	Date	Topic	Readings
1	Tuesday, September 6th	Welcome to Class	None

	Thursday, September 8th	Everything is Information	What is Information. Stacks and Facts. Youtube. J, Bates, Marcia. 2015. "The Information Professions: Knowledge, Memory, Heritage." Text. Professor T.D. Wilson. March 15, 2015.
2	Tuesday, September 13th	Is a hotdog a sandwich? Introduction to information classification and organization.	Glushko, Robert J. Ch 2. 2016, *The Discipline of Organizing: Professional Edition, 4th edition.* O'Reilly Media, Inc. - Ch 12 (select one case study). Ko, Amy. Chapter 1: Foundations of Information. Online.
	Thursday, September 15th	Seminar	
3	Tuesday September 20th	Is the Internet a highway or a cloud? Information as Infrastructure	Glushko Ch 1 pg 25-49; C Crawford and Joler. 2018. Anatomy of an AI. Ko, Amy. Chapter 6: Information Systems.
	Thursday, September 22nd	Seminar	
4	Tuesday September 27th	What's inside a Black Box?	Jim Johnson (Bruno Latour) Mixing Humans and Nonhumans together: Anatomy of a Door Closer. "Demystifying the Black Box That Is AI - Scientific American." n.d.
	Thursday September 29th	Making and Shaping Information Systems	Granfield, M. (2013). Deconstructing UX design. ACM Interactions. Glushko, Chapter 3, 3.1-3.2. Shiri, Ali, Deanna Howard, and Sharon Farnel. 2021. "Indigenous Digital Storytelling: Digital Interfaces Supporting Cultural Heritage Preservation and Access." *International Information & Library Review* 0 (0): 1–22.

			Rowley, Susan, et al. 2010. "Building an On-Line Research Community: The Reciprocal Research Network." In *Museums and the Web 2010: Proceedings.* Toronto: Archives & Museum Informatics.
5	Tuesday, October 4th	NO CLASS	Individual Group Meetings
	Thursday, October 6th	NO CLASS	Individual Group Meetings
6	Tuesday, October 11th	How do we find stuff? Guest Lecture.	Ruthven, I., & Kelly, D. (2011). Interactive information seeking, behaviour and retrieval. London: Facet Pub. Chapter 1+5. Robertson, Craig. 2021. "The Filing Cabinet." *Places Journal*, May. https://placesjournal.org/article/the-filing-cabinet-and-20th-century-information-infrastructure/. Mattern, Shannon. 2019. "Fugitive Libraries." *Places Journal*, October. https://placesjournal.org/article/fugitive-libraries/. Glusko 11.1, 11.2, 11.3
	Thursday October 13th	Seminar	
7	Tuesday October 18th	How do people look for things? Guest Lecture.	Ruthven, I., & Kelly, D. (2011). Interactive information seeking, behaviour and retrieval. London: Facet Pub. Chapter 2. Experience, World Leaders in Research-Based User. n.d. "Information Foraging: A Theory of How People Navigate on the Web." Nielsen Norman Group. Accessed July 28, 2021.. Dervin, Brenda. 1998. "Sense-Making Theory and Practice: An Overview of User Interests in Knowledge Seeking and Use." *Journal of Knowledge Management* 2 (2): 36–46.
	Thursday, October 20th	Midterm Exam	

8	Tuesday October 25th	Am I ever alone online?	Lewis, N. L. (2020). Guest Post: What's in a Category: Definitions of Authenticity, Transparency, and the Social-Bot. Digital Tattoo Blog.
			Wright, J. (2016). Nose Dive (No. 1). In Black Mirror. Netflix.
			How we can find ourselves in data, Giorgia Lupi, Ted Talk.
	Thursday October 27th	Seminar	
9	Tuesday November 1st	Does data care about you?	Noble, S. U. (2018). Chapter 1. Algorithms of Oppression. New York: NYU Press.
			Stephen, B. (2015, October 21). How Black Lives Matter Uses Social Media to Fight the Power. Wired.
			Smith, L. (2018, July 23). Former Baltimore Police Officer Criticizes The Department's Gang Database. The Appeal.
	Thursday November 3rd	Seminar	
10	Tuesday, November 8th	NO CLASS	Group Project Work
	Thursday November 10th	NO CLASS	Mid-Term Break.
11	Tuesday November 15th	Information Overload	Lamont, T. (2020). Can we escape from information overload? 1843 (The Economist).
			Odom, William, MinYoung Yoo, Henry Lin, Tijs Duel, Tal Amram, and Amy Yo Sue Chen. 2020. "Exploring the Reflective Potentialities of Personal Data with Different Temporal Modalities: A Field Study of Olo Radio." In *Proceedings of the 2020 ACM Designing Interactive Systems Conference*, 283–95.
			Seaver, Nick. 2019. "Captivating Algorithms: Recommender Systems as Traps." *Journal of Material Culture* 24 (4): 421–36

	Thursday November 17th	Seminar	
12	Tuesday November 22nd	Keep Calm and Database	Carter, Daniel, and Amelia Acker. 2020. "To Oblivion and beyond: Imagining Infrastructure after Collapse." Environment and Planning D: Society and Space, March, 0263775820911940.

Finn, Megan. 2018. Preface, Ch1 and Ch 5. "Documenting Aftermath: Information Infrastructures in the Wake of Disasters," October.

Blacker, Sarah. 2021. "Strategic Translation: Pollution, Data, and Indigenous Traditional Knowledge." *Journal of the Royal Anthropological Institute* 27 (S1): 142–58. |
	Thursday November 24th	Presentations	
13	Tuesday November 29th	Presentations	
	Thursday December 1st	Presentations	
14	Tuesday December 6th	In Class Exam Review	

Attendance: Attendance is required in all class meetings, in person. If you know you are going to be absent you must inform me beforehand if at all possible.

Evaluation: all assignments will be marked according to UBC grading policy.

Required Textbook:
Glushko, R. J. (2016). The Discipline of Organizing: Informatics Edition. O'Reilly Media, Inc. https://ischools.org/resources/Documents/Discipline%20of%20organizing/Informatics/TDO4-Informatics-CC.pdf (Available in Bookstore or open download via Library Online Course Reserves on Canvas).

Estimated cost of this textbook: The class textbook and all readings are open content or freely available to students through UBC library.

Classroom Policies:

Academic Concession: If you miss marked coursework (assignment, exam, presentation, participation in class) and are an Arts student, review the Faculty of Arts' academic concession page and then complete Arts Academic Advising's online academic concession form, so that an advisor can evaluate your concession case. If you are a student in a different Faculty, please consult your Faculty's webpage on academic concession, and then contact me where appropriate.

Policies and Resources to Support Student Success: UBC provides resources to support student learning and to maintain healthy lifestyles but recognizes that sometimes crises arise and so there are additional resources to access including those for survivors of sexual violence. UBC values respect for the person and ideas of all members of the academic community. Harassment and discrimination are not tolerated nor is suppression of academic freedom. UBC provides appropriate accommodation for students with disabilities and for religious and cultural observances. UBC values academic honesty and students are expected to acknowledge the ideas generated by others and to uphold the highest academic standards in all of their actions. Details of the policies and how to access support are available here (https://senate.ubc.ca/policies-resources-support-student-success)

Academic Integrity: The academic enterprise is founded on honesty, civility, and integrity. As members of this enterprise, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity (i.e., misconduct) lead to the breakdown of the academic enterprise, and therefore serious consequences arise and harsh sanctions are imposed. For example, incidences of plagiarism or cheating may result in a mark of zero on the assignment or exam and more serious consequences may apply when the matter is referred to the Office of the Dean. Careful records are kept in order to monitor and prevent recurrences. A more detailed description of academic integrity, including the University's policies and procedures, may be found in the UBC Calendar: Student Conduct and Discipline. Academic misconduct includes cheating, plagiarism, and self-plagiarism http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,959 (§7)

Academic Accommodation for Students with Disabilities: Academic accommodations help students with a disability or ongoing medical condition overcome challenges that may affect their academic success. Students requiring academic accommodations must register with the Centre for Accessibility (previously known as Access & Diversity). The Centre will determine that student's eligibility for accommodations in accordance with Policy LR7: Accommodation for Students with Disabilities (Joint Senate and Board Policy). Academic accommodations are not determined by your instructors, and instructors should not ask you about the nature of your disability or ongoing medical condition, or request copies of your disability documentation. However, your instructor may consult with the Centre for Accessibility should the accommodations affect the essential learning outcomes of a course.

Other Course Policies and Information:

What you can expect from your Instructor: As your instructor I will do my best to provide a classroom environment that fosters stimulating discussion and where all students feel comfortable

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participating to the best of their ability. Outside the classroom I will be available to meet during office hours and I will attempt to accommodate students who cannot make it during that time. With respect to feedback, I will work to return your work to you within one week of the date you submit your assignment / complete your quiz or exam. If you have questions about a grade, I encourage you to come speak with me during office hours.

Email Communication:
- Assignments must be submitted via Canvas, not via email.
- All course communication should be conducted through Canvas or your email account.
- All emails must include the course code (INFO 200) in the subject line.
- All emails should be signed with the student's full name and student number.
- Emails from students will generally be answered within 2 working days of receipt. (Please don't count on receiving last minute email answers to questions about an assignment. Plan ahead.)