

School of Information Faculty of Arts

We acknowledge that we are on the traditional, ancestral and unceded territory of the həndəminəm 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.

INFO100 (De)coding Information and Why It Matters – Course Syllabus (3)

Program:	BA Minor in Informatics
Year:	2022-2023, W1
Course Schedule:	Mon., Wed., 11am-12:30pm
Location:	LIFE-2202
Instructor:	Dr. Lisa P. Nathan
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Learning Management Site:	<u>https://canvas.ubc.ca/</u>

Calendar Description: Information and data as concepts and aspects of everyday experience. Creation, sharing, authorization, and valuing of information with implications for society. Critical perspectives and practices to engage with data, information, and technologies for personal productivity, scholarly inquiry, and civic engagement.

Course Overview:

In an era of the cloud and big data, we are told that information is everywhere, but what is it and why does it matter? In this course, learners will develop critical perspectives to engage with data, information, and technologies. Through readings, podcasts, videos, games, tutorial discussions, and lectures, we will learn to (de)code information, identifying different ways of conceptualizing what counts as "information", and why this concept matters. We will consider the myriad influences of information on daily life, drawing upon fascinating case studies from the past and present to understand how information is manifest in various critical issues, such as fake news, climate justice, online privacy, Indigenous rights, refugee status, racism, ableism, and gendered discrimination. With an eye towards the future, we will think critically about how interactions with information condition the possibilities for different ways of being in the world. We will ask questions such as: why does "information" mean different things in different disciplines, in different cultures? What stories can be told with data about you? How and why are some people marginalized by the systems that produce and disseminate information? We will examine the processes by which information is created, when, where, and how information authority is constructed, and the ways in which information is valued. Activities and discussions will support learners in practicing applications and developing pragmatic, reflective strategies to take forward in their studies and daily interactions with information.



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Learning Outcomes and Informatics Program Competencies ("PC's"):

Upon completion of this course students will be able to:

LO1: Identify types of information, and the processes by which information is created, circulated, authorised and valued. [PC1]

LO2: Describe how conceptualizations of information have shifted over time and across cultures. [PC1], [PC3], [PC4]

LO3: Question and appraise what makes different information sources authoritative and the ways in which authority is constructed and contextual. [PC1], [PC3], [PC4]

LO4: Engage in strategies for creating, presenting, searching, selecting, and analyzing information. [PC1], [PC 2], [PC 3], [PC 4], [PC5], [PC 6]

LO5: Investigate the influence of different types of information on your daily life and on those around you. [PC1], [PC2], [PC 3], [PC4]

LO6: Critically analyze stories/claims about information, data and technology in popular discourse, fiction, and scholarship. [PC1], [PC3], [PC4]

LO7: Explain how different conceptualizations of information relate to human values, such as privacy, safety, Indigenous sovereignty, care, stewardship, and truth. [PC1], [PC3], [PC4]

Course Topics:

- Perspectives on information and data
- Information technologies and their design
- Information and authority
- Information and interpretation
- Information ethics
- Information futures and fictions
- Misinformation and fake news
- Big Data and surveillance capitalism
- Privacy
- Organizing, power, and (big) data
- Social movements and communities
- Policy and responsibility

Prerequisites: None

Format of the course:

Two weekly 90-minute sessions with a mix of lectures, in-class activities, discussions and guests.

Required and Recommended Reading:

Material from books, journals, podcasts, videos and websites will constitute required material (readings). These will be available via the course learning management system (i.e., Canvas) typically through collections provided by UBC libraries. Assigned material may shift during the course as the topic areas covered in this class are often covered by mainstream media channels. **INFO 100 modules in Canvas** are the definitive resource.





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We select material for this course with an eye towards diverse perspectives on information. The positions presented are disputable and I count on you to help us find and articulate problematic (and generative) areas in argument, positioning, methodology, findings presented and/or conclusions drawn. Other factors that guide the selection of material are media type, length, novelty, longevity and influence of the author(s) on the topic area.

We value your unique perspective in this course, recognizing that it is informed and constrained by identity, gender, spirituality, socio-cultural background, etc. We also value the (likely different) perspectives of your colleagues. There is not a single way to interpret these works.

You are expected to engage all assigned material thoroughly and critically.

- Take notes (do not just highlight or underline).
- Put ideas into your own words
- Question claims and assertions
- Bring these questions to class

Course Assignments and Assessment:

Assignment Name	Due Date	Weigh t	Learning Outcomes	Program Competencies
Life Logging/Data Stories	Oct. 14@ 9pm (Canvas)	35%	LO1 & LO3- 6	[PC1], [PC2], [PC3], [PC4], [PC5], [PC6]
Information Playlist and Reflective Essay	Nov. 11@ 9pm (Canvas)	35%	LO1, LO3, LO4	[PC1], [PC2], [PC3], [PC4], [PC5], [PC6]
Final Exam	TBD (UBC will inform us during term).	30%	LO1-7	[PC1], [PC 3], [PC4]

Course assignment descriptions:

Life Logging / Data Stories (35%)

- What questions might you have about your daily activities, habits, places you visit, routes you take, that data might be able to answer?
- What visual stories are you able to create from data that you collect about yourself?
- How does the data you collect limit or expand your ability to tell a story drawing only on the data you collect?

Guided by questions that you have about your life (e.g., daily activities, habits, places you visit, routes you take), you will identify 2 sets of 'data' that you are able to collect about your activities. Data might include physio-metric indicators (e.g., heart rate, blood pressure), travel (e.g., number of bus rides, walking distance), financial accounting (e.g., types of expenditures per day), or particular about behaviours (e.g., percentage of your awake hours spent on Reddit, number of hugs accepted). At least one of your data sets must involve manual tracking (i.e., not logged by a digital device). You will develop a systematic way to collect each set of data and record it over the span of seven consecutive



days (all in a row). You will present both sets of data in two different ways (i.e., visualizations). That means there will create a total of four visualizations based on your "life logging".

Data Set A will be turned into Visualization #1 and #2 Data Set B will be turned into Visualization #3 and #4

You will have opportunities to workshop your data collections and visualizations with others during class sessions.

Guiding Questions

• What stories can be told by your data?

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- What is hidden/revealed by your data?
- How might this data be used by or be valuable to yourself and others (e.g., classmates, parents, doctors, employers, strangers)?
- What are the implications of representing the data differently (e.g., if it were consumed by an algorithm, aggregated versus disaggregated, de-identified/pseudonymized)?

Assessment Criteria

You will be assessed on: 1) quality and communicative value of the visualizations (60%); 2) formatting and following directions (30%); 3) creativity and originality (10%). Examples of personal data stories can be found at: <u>https://fivethirtyeight.com/features/we-asked-you-to-visualize-your-podcast-listening-and-wow-did-you-deliver/</u>

Information Playlist and Reflective Essay (30%)

You will search for, select, organize, and present a collection of items in a particular form or on a topic (e.g., memes, podcast episodes, videos, blogs, artworks, artifacts, information visualizations). Items do not need to be digital, but a representation of the item (image, description, or surrogate) must be included in the deliverable. The collection should at minimum comprise 30 items and include 2-3 sentences of annotation for each item. The collection must have clear criteria for inclusion and exclusion. The items are to be curated; that is, you should be able to present a rationale for your expertise in selecting both the topic and the materials in your collection.

In addition to the list of items, you will write a reflective essay (~1200 words) in which you will discuss how and why the list was created.

Guiding Questions:

- What were key decisions about selection, organization, and presentation?
- Who were the creators of the items selected, and what was their process of creation?
- How were items searched for and evaluated?
- What didn't make the cut and why?

Assessment Criteria:

- The creativity and originality of the collection (30%) will be assessed on how well the curated media reveals your distinct voice and perspective, and connects with your stated expertise.
- The quality of the reflection (60%) will be assessed on how well it addresses the guiding questions (who, what, how) and illuminate the decision-making process of the collection, builds on course concepts and ideas, and *acknowledges course readings* in the rationale.



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• Formatting, mechanics and following directions (10%), although a minor aspect of the assignment, should not be dismissed. You should write professionally, cite properly, and arrange your collections for accessibility.

Model collections will be workshopped during class as "worked examples" to further elaborate these criteria.

Final Exam (30%)

This summative assessment will include two parts:

Part 1 (50%): You will demonstrate your knowledge of course concepts through multiple choice and short answer questions.

Part 2 (50%): You will be provided a series of cases to analyze through short essays (~300 words each). Several similar or related cases will have been presented and workshopped throughout the term. Students will analyze cases using the information skills and dispositions grounded in the ACRL Framework, and the human values lens that has guided the topics this term. Cases will include the role of information in historical situations as well as contemporary concerns (e.g., deep fake videos, artificial intelligence, facial recognition, autonomous vehicles).

Assessment Criteria:

You will be assessed on the following criteria: 1) Clear identification of the dispositions and human values that may be implicated by the case (30%); 2) development of a coherent argument about the role of information skills connected to the case that is supported with details (50%); 3) writing quality and mechanics (20%).

Course Schedule [week-by-week]:

WK Date	Торіс	Assigned Material (Consult Canvas for Final Selections)	
	Part One: What is information / Information Creation as Process [ACRL 2]		
WK 1 Sept 6 -9	Introduction to course material, course structure, Canvas site, and your fellow travelers on this information matters adventure.	 [1] Log into and review structure of course Canvas site [2] Crash Course. (2019, January 8). Introduction to navigating digital information [Video]. Retrieved from <u>https://youtu.be/pLlv2o6UfTU</u> 	
WK 2 Sept. 12-16	What is information? [ACRL 2]	 [1] Buckland, M. K. (2017). Chapter 1: Introduction. <i>Information and</i> <i>society</i> (pp. 1–19). MIT Press. 	



	 Information as thing, knowledge, process, etc. Different information in everyday life How is information made? What counts as information? What is data? In Discussion: Introduce ACRL framework and how it has informed the structure of this course.	 [2] Brown, J. S., & Duguid, P. (2017). Chapter 1: Limits to information (pp. 11–33). <i>The social life of</i> <i>information</i>. Harvard Business School Press. Available through First Monday 5(4) April 2000 <u>https://firstmonday.org/ojs/index.ph</u> <i>p/fm/article/view/738/647</i> [3] Lawson, K. L. (2004). <i>Precious</i> <i>fragments: First Nations materials</i> <i>in archives, libraries and museums</i> [UBC]. Abstract only, pp vi-ix) <u>https://doi.org/10.14288/1.0091657</u>
WK 3 Sept. 19-23	 Information technologies and their design [ACRL 2] Historical and contemporary examples of information technologies Socio-technical perspectives Technological determinism In Discussion: Histories of everyday technologies, and the unintended effects of innovation	 Bijker, W. E. (1999). Ch. 1 – Introduction. <i>Of bicycles, bakelites,</i> <i>and bulbs: Toward a theory of</i> <i>sociotechnical change</i> (3. Aufl) (pp. 1-17). MIT Press. Wright, A. (2014). Introduction (pp. 3–19). <i>Cataloging the world: Paul</i> <i>Otlet and the birth of the</i> <i>information age</i>. Oxford University Press.
	Part Two: Information Stories/ (De)Coding Constructed and Contextual [ACRL 1]	Information / Authority Is
WK 4 Sept. 26-30	 Learning from Information Stories (T)ruth claims in news media, science and scholarship, popular culture Examples of constructing understandings from data and information Knowledge as situated, generated, and given authority within cultural, social, historical, and other contexts In Discussion: Identifying truth claims and knowledge warrants in technology-mediated discourse 	 Durrant, A. C., Trujillo-Pisanty, D., Moncur, W., & Orzech, K. (2015). <i>Charting the digital lifespan:</i> <i>Picture Book</i> (pp 1-29 – mostly images). University of Newcastle. Available through <u>https://core.ac.uk/download/pdf/80</u> <u>687203.pdf</u> Wright, A. (2008). Chapter 3: The ice age information explosion. <i>Glut:</i> <i>Mastering information through the</i> <i>ages</i> (pp. 39–47). Cornell University Press.



WK 5 Oct. 3-7	 The Humanistic Tradition: Information and Interpretation Visual information and the arts Interpretation Information stories and diverse storytelling approaches Learning and negotiating values In Discussion: the quantified self and your data in the world 	 [1] King, T. (2010). Ch. 2: You're not the Indian I had in mind. <i>The truth</i> <i>about stories: A native narrative</i> (pp 31-60). House of Anansi Press. [2] Lupi, G., & Posavec, S. (2016). <i>Dear data.</i> Chronicle Books. [select topics, available online through UBC Library] [3] Dinkins, S. <i>Not the only one.</i> Retrieved from <u>https://www.stephaniedinkins.com/</u> <u>ntoo.html</u>
WK 6 Oct 10-14	 Misinformation or Disinformation (or fake news?) Credibility, trust, authority and authorship Algorithmic culture Strategies for identifying dis/misinformation Assignment Due: Life logging / Data Stories 	 [1] CBC. (2019). Fake news and disinformation collection. [Selected Videos]. Retrieved from <u>https://curio.ca/en/collection/fake- news-and-disinformation-2696/</u> [2] Noble, S. U. (2019). Recorded lecture: <i>Algorithms of Oppression:</i> <i>How search engines reinforce</i> <i>racism.</i> (60 min. talk) <u>https://www.youtube.com/watch?v</u> <u>=n3dQUYTN9PA</u>
WK 7 Oct. 17-21	 Frameworks and concepts for thinking through ethical implications Values and design Equity and intersectionality Indigenous ontologies Materiality of data and digital information In Discussion: Sharing data stories 	 Duarte, M. E., & Belarde-Lewis, M. (2015). Imagining: Creating Spaces for Indigenous Ontologies. Cataloging & Classification Quarterly, 53(5–6), 677–702. Lupton, D. (2019). Chapter 3: Materializing data (pp. 44–73). Data selves: More-than-human perspectives. John Wiley & Sons. D'Ignazio, C., & Klein, L. F. (2020). Introduction. Data feminism. MIT Press. 19 pp. Available online through UBC Library
WK 8 Oct. 24-28	 Information Futures Science fiction and future information technologies Past and present imagined futures Design fictions 	 Maynard, A. D. (2018). Chapter 1: In the Beginning. <i>Films from the future: The technology and morality of sci-fi movies</i>. Mango Publishing. Golbeck, J. (2014, April 29). What a Toilet Hoax Can Tell Us About



	In Discussion: Curating information. Examining and assessment information collections	the Future of Surveillance. <i>The</i> <i>Atlantic.</i> https://www.theatlantic.com/techno logy/archive/2014/04/what-a-toilet- hoax-can-tell-us-about-the-future- of-surveillance/361408/ [3] Select one film/TV episode to watch: - Minority Report - Citizen Four - The Social Network - The Circle - A.I. - Wall-E - Black Mirror
	Part Three: Why does it matter? / Informat	ion has Value
WK 9 Oct. 31- Nov. 4	 The Attention and Accumulation Economy Surveillance capitalism Information overload Contemplative and reflective approaches "Free" information In Discussion: Activity - Copyright, Fair dealing and you – what are your obligations? Assignment Due: Information Playlist and Reflective Essay	 [1] Ekbia, H., & Nardi, B. (2014). Heteromation and its (dis) contents: The invisible division of labor between humans and machines. <i>First Monday, 19</i>(6). Retrieved from https://firstmonday.org/article/view /5331/4090 [2] Levy, D. M. (2007). No time to think: Reflections on information technology and contemplative scholarship. <i>Ethics and Information Technology, 9</i>(4), 237–249. https://doi.org/10.1007/s10676- 007-9142-6 [3] Ali, R., Arden-Close, E., & McAlaney, J. (2018). Digital addiction: How technology keeps us hooked. Retrieved from https://theconversation.com/digital- addiction-how-technology-keeps- us-hooked-97499
WK 10 Nov. 7-8	 Privacy and Its Discontents [ACRL 3] Changing conceptions of privacy Transparency Data protection 	[1] Bogost, I. (2018, March 22). My Cow Game Extracted Your Facebook Data. <i>The Atlantic</i> . <u>https://www.theatlantic.com/techno</u> <u>logy/archive/2018/03/my-cow-</u> <u>game-extracted-your-facebook-</u> <u>data/556214/</u>



	In Discussion: Activity – assessing your "information value"	 [2] Sauter, M. (2019, February 1). The Future of Privacy: Will your life ever be private online? <i>The</i> <i>Walrus</i>. Retrieved from <u>https://thewalrus.ca/the-future-of-privacy/</u> [3] Podcast: Good Code, Episode 2: Helen Nissenbaum on Post-Consent Privacy. Retrieved from <u>https://www.tech.cornell.edu/news/ good-code-podcast-episode-2- helen-nissenbaum-on-post- consent-privacy/</u>
WK 11 Nov. 14-18	 Organizing, Power, and (Big) Data Histories of categorization Bureaucracy, statistics, and power In Discussion: Activity - analyzing big data cases, then and now 	 [1] Big data problems we face today can be traced to the social ordering practices of the 19th century. (2015, October 13). <i>Impact of</i> <i>Social Sciences</i>. LSE. <u>https://blogs.lse.ac.uk/impactofsoci</u> <u>alsciences/2015/10/13/ideological-</u> <u>inheritances-in-the-data-revolution/</u> [2] Bowker, G. C., & Star, S. L. (2000). <i>Sorting things out: Classification</i> <i>and its consequences</i> (Ch. 1). MIT Press. [3] Podcast: Code Switch, Who Counts in 2020? Retreived from <u>https://www.npr.org/2020/03/31/82</u> <u>4922461/who-counts-in-2020</u>
WK 12 Nov. 21-25	 Social Movements and Community-Led Projects with Data, Information, Tools Community-based organizing Using data, information, and digital tools to work against colonialism, injustice, bias, discrimination, surveillance Digital and non-digital citizenship Social movements online and offline In Discussion: Close reading social movements	 Brown, P., Carpenter, J., Lawson, G., Lawson, K., Nathan, L. P., & Turin, M. (2017). Uplifting Voices. In P. N. Nemetz, M. Young, & P. D. Tortell, Reflections of Canada: Illuminating our opportunities and challenges at 150+ years (pp. 264–269). Peter Wall Institute for Advanced Studies. Costanza-Chock, S. (2018). Design justice, AI, and escape from the matrix of domination. Retrieved from https://dspace.mit.edu/bitstream/ha ndle/1721.1/123083/09792f03- <u>3169-4a92-badb-</u>



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		 <u>49160f5e57ef.pdf?sequence=2&is</u> <u>Allowed=y</u> [3] Hintz, A., Dencik, L., & Wahl-Jorgensen, K. (2018). Chapter 1: Citizenship in a digital age (pp. 20-41). <i>Digital citizenship in a datafied society</i>. John Wiley & Sons.
WK 13 Nov. 28- Dec. 2	 Policy and responsibility Introduction to information policy Everyday encounters with policy: notice and consent, terms of service, personal security Indigenous data sovereignty Responsibility, and thinking beyond individual-level responsibility Freedom of expression and limitations In Discussion: Activity - building better privacy policies and end-user license agreements	 [1] (Aki-kwe) Turpel-Lafond, M. E., & Chondoma, L. (2019). Building Indigenous-led Engagement Frameworks: Report on the Dialogue on Indigenous Data, Information and Records (p. 8) University of British Columbia. https://research.ubc.ca/sites/resea ch.ubc.ca/files/u9680/SSHRC_Pos itionPaper_Report_SUMMARY.pdf [2] Hintz, A., Dencik, L., & Wahl- Jorgensen, K. (2018). Chapter 3: Regulating datafication (pp. 63– 82). Digital citizenship in a datafied society. John Wiley & Sons. [3] Lee, U., & Toliver, D. (2017). Building consentful tech. Retrieved from http://www.consentfultech.io/wp- content/uploads/2019/10/Building- Consentful-Tech.pdf
WK 14 Dec. 5-7	Course Wrap-up	TBD

Attendance:

- Attendance is required for all class meetings
- Participation in class-based exercises is an important aspect of student learning and there will be many ways to participate
- If you are sick, it is important that you stay home.
- If you know you are going to be absent, I *deeply appreciate* if you alert me beforehand if at all possible.
- If you are feeling ill at the time of a final exam, do not attend the exam. You must apply for deferred standing (an academic concession) through Arts Academic Advising. Students who are granted deferred standing (SD) will write the final exam/assignment at a later date.

Evaluation: all assignments will be marked according to <u>UBC grading policy</u>.



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All assignments due dates/times are noted in the **assignment description in Canvas**. Course time should not be used to complete and upload your assignments. Late work is assessed at 5% of final mark for that assignment per day, up to 7 days, after which work will not be accepted. Grace periods (i.e., no late deduction) may be offered under special circumstances when you contact the instructor **24** hours in advance of the due date.

Required Materials: There are no materials (i.e., textbooks, reading packages, lab manuals) that you will need to purchase. Required material will all be available through Canvas, UBC Library, or another accessible, online resource.

Academic Concession: If you miss marked coursework (assignment, exam, presentation, participation in class) and are an Arts student, review the Faculty of Arts' <u>academic concession page</u> and then complete Arts Academic Advising's <u>online academic concession form</u>, so that an advisor can evaluate your concession case. If you are a student in a different Faculty, please consult <u>your Faculty's webpage</u> 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 <u>UBC Calendar: Student</u> <u>Conduct and Discipline</u>. Academic misconduct includes cheating, plagiarism, and self-plagiarism <u>http://www.calendar.ubc.ca/vancouver/index.cfm?tree=3,54,111,959</u> (§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 <u>Centre for Accessibility</u> (previously known as Access & Diversity). The Centre will determine that student's eligibility for accommodations in accordance with <u>Policy LR7: Accommodation for Students with</u> <u>Disabilities (Joint Senate and Board Policy)</u>. 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.



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Additional course information:

All students in INFO 100 are expected to:

- Engage course material critically
- Generate questions and comments, contribute these to class discussions, and apply them to written assignments/class exercises
- Respond to and engage with the contributions of the other students with consideration and respect
- Bring personal ideas and discoveries to class
- Provide periodic feedback on the content and conduct of the course