Searching For SCHOLARLY INFORMATION: Where & How **LIBRARY SESSION FOR ENCS 282**

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AGENDA

- I. Where to search?
- 2. How to evaluate?
- 3. What are scholarly sources?
- 4. How to access library tools?

WHAT SEARCH TOOL DO YOU USE TO FIND ACADEMIC INFORMATION?

WHAT IS THE DIFFERENCE?

GOOGLE SCHOLAR



Volume | Quantity | Quick

LIBRARY DATABASES



Depth | Quality | Thorough

Left image: Yinan Chen, Dining Court, public domain, <u>https://pixabay.com/photos/dining-court-shopping-mall-corridor-347314/</u> Right image: Jason Briscoe, Cooking, public domain, <u>https://unsplash.com/photos/VBsG1VOgLIU</u>

WHERE SHOULD YOU SEARCH?

AlTools Library Discovery Tool **IEEE** Xplore (Library Database) Grey literature (e.g. government documents, NGO reports, working papers, newsletters, patents, preprints) Engineering Village (Library Database) Google/Google Scholar

HOW IS USING Chatgpt different From Googling?

HOW ARE THEY DIFFERENT?

GOOGLE

Information retrieval

Index of web-based information

List-based results, one-way interaction

Retrieve results based on ranking algorithms (e.g. keyword matching, relevance, page linking)

CHATGPT

Information generation

Human-like responses to prompts

Conversation-based results, often very persuasive

Generate unique responses based on what it has learned about patterns and sequences of words from massive training datasets



daily water intake

All Images Shopping Videos Short videos Forums News More

🔶 Al Overview

The recommended daily water intake for adults is about 15.5 cups (3.7 liters) for men and 11.5 cups (2.7 liters) for women. However, individual needs can vary based on activity level, health conditions, and climate.



Factors Affecting Water Intake: 🥏

- · Activity Level: More physically active individuals may need more water.
- · Health Conditions: Some medical conditions may require increased fluid intake.
- Climate: Hot and dry climates can increase water loss through perspiration, requiring more fluid intake.
- Medications: Certain medications can affect fluid balance.

General Guidelines: 🥏

- Listen to your body: Drink when you feel thirsty, even if it's just a few sips. 🥏
- Hydrate throughout the day: Don't wait until you're thirsty to drink.
- Consider other sources of fluids: Fruits and vegetables contribute to hydration.
- Avoid excessive sugary drinks: Sugary drinks can contribute to weight gain and other health problems.

Tips for Staying Hydrated: 🥏

- Carry a water bottle: Keep a water bottle with you throughout the day and refill it as needed.
- Eat hydrating foods: Include fruits and vegetables with high water content in your diet.
- Set reminders: Use a water bottle app or other reminders to help you drink regularly.

Al responses may include mistakes.



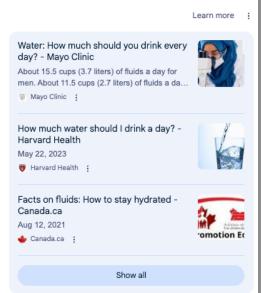
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Mayo Clinic https://www.mayoclinic.org > water > art-20044256

Water: How much should you drink every day?

How much water do you need? \cdot About 15.5 cups (3.7 liters) of fluids a day for men \cdot About 11.5 cups (2.7 liters) of fluids a day for women.



X 🌷 🙃 🔍

Tools .

THE SEARCH AS WE KNOW IT IS CHANGING

- GenAl-powered functionality is being introduced in major search engines such as Google and Bing
- The AI Overview does point to actual links, but the summary is subject to hallucination
- Google has the disclaimer "Al responses may include mistakes" in its Al Overview

ACKNOWLEDGING THE USE OF AI TOOLS

BE TRANSPARENT AND DOCUMENT THE PROCESS

What AI tool was used & How it was used

Keep a record of the prompts and interactions

ATTRIBUTION VS CITATION

!

Generally, generative AI technologies are considered tools rather than information sources, so a source citation may not be required. Instead, an attribution acknowledging that one or more tools was used and in what ways may be more appropriate.

ACKNOWLEDGING THE USE OF AI TOOLS OR AI-GENERATED CONTENT

EXAMPLES OF ATTRIBUTION / ACKNOWLEDGEMENTS

- Provide a statement explaining the use of AI tools where appropriate (e.g., Introduction, Declaration, Acknowledgement)
 - ChatGPT and Gemini were used to provide grammar and style revisions for the Methodology section.
 - Figure 2 was generated using Midjourney with the prompt "a children's crayon drawing of a country house".
 - I used Google NotebookLM to generate a summary of the audio file. I modified the output based on my own notes.
 - I used Perplexity to translate this document from French to English, and then I used ChatGPT to translate it back to French from English. I have compared and edited the outputs for accuracy.
 - SciSpace was used for summarizing and extracting information in the initial literature review process.

ACKNOWLEDGING THE USE OF AI TOOLS OR AI-GENERATED CONTENT

AN EXAMPLE OF A SOURCE CITATION

- In some contexts, a formal citation may be needed.
- Include the prompts/interactions in the body of the text or in the appendix
- An example in IEEE style:

When prompted with "Is the left brain right brain divide real or a metaphor?" the ChatGPTgenerated text indicated that although the two brain hemispheres are somewhat specialized, "the notation that people can be characterized as 'left-brained' or 'right-brained' is considered to be an oversimplification and a popular myth" [1].

[1] Text generated by ChatGPT, OpenAI, May 21, 2024, https://chat.openai.com/chat.

EVALUATING INFORMATION

STRATEGIES AND CONSIDERATIONS

THINK, PAIR, SHARE

Talk to the person next to you for 5 minutes:

What are some ways to ensure that the information you find online is accurate and reliable?

EVALUATING INTERNET INFORMATION

What do fact checkers do?

- Spend more time scanning the snippets on the results page before clicking
- Know what you read before you read it
- More lateral reading than vertical reading

BE MORE INTENTIONAL

Consider these factors as much as possible

- \bigcirc Who is behind the information?
- \bigcirc What is the evidence?
- \rightarrow What do other sources say?

- \bigcirc Who is the intended audience?
- > What is scope/depth/breadth?
- \bigcirc How current is the information?

Do the sources confirm or contradict with your prior beliefs?

Caulfield, M. (2019, June 19). SIFT (The Four Moves). Hapgood. https://hapgood.us/2019/06/19/sift-the-four-moves/

Wineburg, S., & McGrew, S. (2019). Lateral Reading and the Nature of Expertise: Reading Less and Learning More When Evaluating Digital Information. Teachers College Record, 121(11), 1-40. https://doi.org/10.1177/016146811912101102

TYPES OF INFORMATION SOURCES

WHAT IS CONSIDERED SCHOLARLY?

NAVIGATING **SCHOLARLY** INFORMATION

ANSWER POLL QUESTIONS ON MENTIMETER

CONTEXTUALIZE THE PROBLEM WITH INFORMATION

You need to design a playground for a neighbourhood

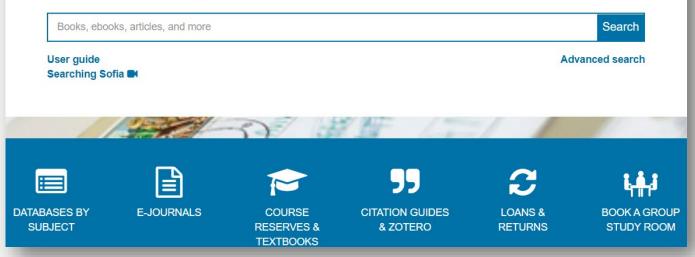


Van Epps, A., & Cardella, M. (2013). Scout the lay of the land: Understanding the broader context of a design project. In M. Fosmire & D. Radcliffe (Eds.), Integrating Information into the Engineering Design Process (pp. 101-114). West Lafayette: Purdue University Press.

LBRARY **DISCOVERY TOOL**

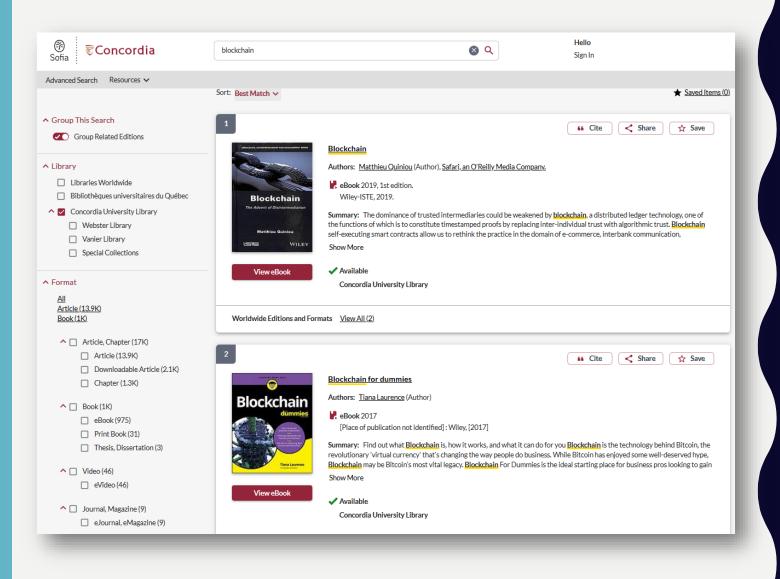
THE MAIN LIBRARY SEARCH TOOL

Sofia Discovery tool



LIBRARY DISCOVERY TOOL

- Front and centre on the library homepage
- A good starting point for a general search across library resources
- Answer questions such as:
 - Does the library have this book?
 - Does the library have this journal article?
 - Does the library have some background/overview information on a topic?



LIBRARY DISCOVERY TOOL

- A search for a broad keyword such as blockchain
- Refine options include:
 - Format types (e.g. ebooks)
 - Publication years
- Shows results with Concordia full text access by default
 - Easily expand to other university libraries in Québec or Worldwide
 - Easily make requests for items from other university libraries

LBRARY DATABASES

OVER 400 OF THEM ORGANIZED BY DISCIPLINE

Engineering Village[™]

IEEE

Clarivate Web of Science[™]



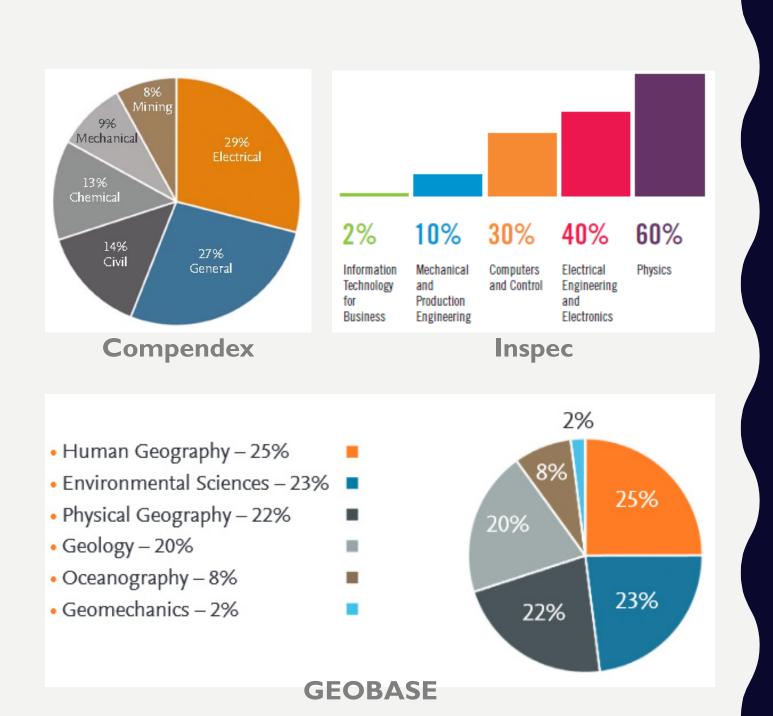
Scopus[®] Knovel[®]

LIBRARY DATABASES

- Content is usually more in-depth and specialized
- More options to search, expand, or refine
- Answer questions such as:
 - Where can I find journal articles on a specific aspect of a topic
 - How can I combine different elements/keywords in a search?

ENGINEERING VILLAGE

A CLOSER LOOK AT AN ENGINEERING DATABASE



WHAT CONTENT IS INCLUDED?

With a coverage of 1884 to the present, the three indexes **Compendex**, **Inspec**, and **GEOBASE** provide content in general engineering as well as more specialized engineering disciplines.

Document type 🖽 💵	e) 🛃	Filter results: Start typing	to filter results
Conference article	(395,204)	Erratum	(329)
Journal article	(290,757)	Retracted	(218)
Preprint	(129,714)	Data Paper	(98)
Conference proceeding	(11,442)	Report review	(85)
Article in Press	(6,696)	Standard	(43)
Book chapter	(5,173)	Editorial	(38)
Dissertation	(2,049)	Patent	(4)
Book	(566)	Report chapter	(4)
View 20			
View: 10 Max			Limit to Exclude

IS THE CONTENT PEER-REVIEWED?

- Journal articles are peer-reviewed
- Some conference articles/proceedings are peer-reviewed
- Recently, preprints have been included in the results in Compendex
- Preprints are NOT peer-reviewed, but are helpful in exploring the latest papers

Thermal effects and anomalies in the low-temperature plasticity of crystals

Malygin, G.A. (A.F. loffe Physicotech. Inst., St. Petersburg, Russia) Source: Physics of the Solid State, Database: Inspec Document type: Journal article (JA)

Detailed Show preview \checkmark Cited by in Scopus (2)

Findit!@Concordia

"Full text" button, if one exists

"Find it @ Concordia" button to check the library's other subscriptions. If not available, request it via **Interlibrary Loan**.

Full text 7

HOW TO ACCESS FULL TEXT?

Full text may be readily available. If not, the "Find it @ Concordia" button can help check for full text availability in the library.



Concordia > Library > Sofia > Find full text

Contactless Book Pickup and Article/Chapter Scan & Deliver are available, see Library services and resources during COVID-19.

i INFO	Distribution pattern of heavy metals in soils with respect to typical land uses in electron Article, Chapter Authors: Wen-Cheng Wu
VIEW FULL TEXT	Publication: Zhongguo Huanjing Kexue/China Environmental Science, Volume:38, Issue:7, Page(s):2632-2638 Published: 2018 ISSN: 1000-6923
BROWSE RELATED ARTICLES	Access full text via journal or collection links below. We were unable to find direct full text links for this item. <u>Check for print holdings</u>
	Print copies at your library Check for print holdings
REQUEST	Request a copy of this item
CITE	Request via Interlibrary Loan

INTERLIBRARY LOAN

- If Concordia Library doesn't have it, use Interlibrary Loan
- Takes a few days or longer to process depending on the item

A OUICK DEMO OF ENGINEERING VILLAGE

Help & how-to

Subject & course guides





Engineering & Computer





Humanities

Business

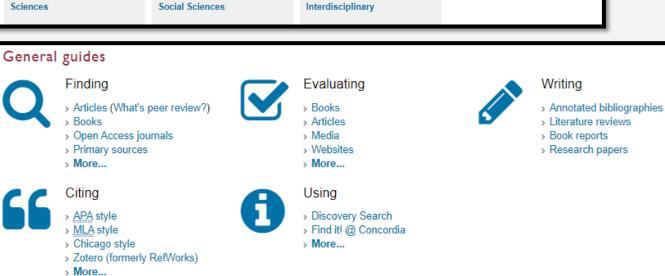


Science



Fine Arts

Interdisciplinary



HELP & HOW-TO **GUIDES**

Subject guides are available for all schools, including one for Engineering and Computer Science.

General guides cover various topics from peer review articles to annotated bibliography.

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514-848-2424 ext. 7909

Feel free to contact me for an appointment inperson or online.

SCHEDULE AN APPOINTMENT

I can help you with library resources and services, including but are not limited to:

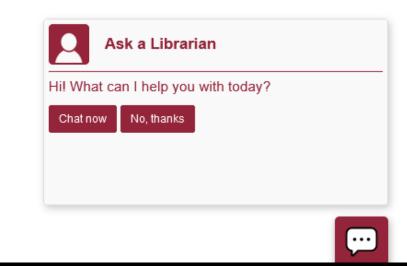
- Locate specific items (e.g. books, articles)
- Navigate resources related to engineering and computer science
- · Literature searching
- · Citations and references
- · Recommend new resources

Today's opening

hours

Webster Library: 24 hours Vanier Library: 24 hours Grey Nuns: Closed until October 2022

Look ahead



ASK A LIBRARIAN

Contact the library in-person, by email, chat, or phone.

Contact your subject librarian (that's me!)

