RESEARCH SKILLS & LIBRARY RESOURCES

Using the Library to conduct research for your Capstone projects
Class Objectives

1. Develop effective search terms
2. Use library’s specialized databases
3. Evaluate your sources
Why the Library?

- Collection of subject-specific resources
- No profit incentives (Google)
- Library consortiums / Interlibrary loans
- Skilled professionals to help
- Group Study Rooms, Printing, Calculators, Course Textbooks
Video: “Should I be using Google or the Library resources for a paper?”

https://www.youtube.com/watch?v=IDIEptoAdKc
Developing Search Terms

1. Topic
2. Explore Topic
3. Research Direction
4. Related Concepts
5. Search Terms
“Water Treatment”

Program learning, current trends, latest research, conference topics,

The question you seek to answer about “Water Treatment”

Related Concepts

Search Terms
Research Direction

“Could a waste water treatment plant in Calgary produce biomethane?”

Main Concepts: Waste water treatment, biomethane

Sub concepts: Calgary, Plant
Research Direction ➔ Related Concepts

- Biogas
- Municipal
- Biomass
- Sludge
- Sewage
- Renewable
- algae
- Emissions Reduction
- Anaerobic

Waste Water Treatment Biomethane
Activity: Create your own Concept Map

1. Write down a research question (direction) for your topic.
   i.e. "Could a waste water treatment plant in Calgary produce biomethane?"

2. Write the main concept(s) of your research question in the center box of the paper
   i.e. "waste water treatment" "biomethane"

3. Start by thinking of terminology, synonyms, names, processes etc. related to the words in
   the center

4. Use online searching and the library’s search tool to get more ideas. Sait.ca/library

5. Aim for 5-10 related concepts on your map
Related Concept → Search Terms

Main Concepts

- Waste Water Treatment
- Biomethane

- Municipal
- Sewage
- Biomass
- algae
- Biogas
- Sludge
- Renewable
- Anaerobic
- Emissions Reduction

Combine to find relevant sources
Library Search and Specialized Databases

SAIT.ca/Library

libguides.sait.ca/inst396
Search Operators

**AND** – connects different concepts, limits search, reduces results

**OR** – finds different ways to say something, expands search, increases results

**NOT** – excludes results with the specified word, reduces results

* – electric* [= electric, electricity, electrical, electrician]

“” – keeps words in exact order, “power plant”
Evaluating Information Sources

Relevance
Authority
Date
Appearance
Reason
Relevance – Does the source provide an answer to your research direction?

Authority – Was the source created by a credible author or organization? What is their experience, education, affiliation?

Date – Was the source published too long ago? Has the technology advanced since then?

Appearance – What TYPE of source is it? Are there visible citations, photos?

Reason – Why was this source created? To inform? To sell? To entertain? Is there bias? Incentive?