Lesson Plan:

Advanced Research Techniques

# Learning Objectives:

**Concrete skills: after this class, students will be able to:**

* Find appropriate sources to support your research question
* Understand how to use Boolean operators and truncation when searching
* Effectively evaluate sources of information

# INTRO (5 mins)

* Show the [Online Course Guide](https://guides.lib.montana.edu/?b=t), or the [MSU Library Research Guide](https://guides.lib.montana.edu/libraryresearch) with reminders about the following information.

# DISCUSSION (15 mins)

* Show of hands: How many of you feel comfortable doing research using the library website?
* How many of you know what criteria to consider when evaluating sources of information?
* How many of you feel comfortable with citations, including formatting & citing all your sources correctly?
* Write on the board the list of the following Advanced search techniques, and ask students what ones they can explain (offer students the option to share verbally or in writing):
  + **Peer Review –** what is it, who can explain?
  + **Boolean operators** – who has used/can explain what these are?
  + **Truncation techniques** – who can explain?
  + **Thesaurus in databases** – who can explain?
  + **Subject headings & keywords** – who can explain?
  + **Pearl referencing –** who can explain?
  + **Search by Subject & format –** media, newspaper, etc.
  + **Bias -** what is it, who can explain?
    - discuss how sources can be useful in different contexts (i.e. biased piece would not be appropriate for a factual overview, but would be appropriate for paper showing the range of human opinions on a topic)
  + **CRAAP Test -** (just one tool for evaluating sources) what is it, who can explain? Why use it?
  + **Cross Referencing –** (another method for evaluating sources) who can explain?
  + **Site:.gov –** This allows you to search the internet for information on government websites only
  + **Connect Google Scholar** **to Library Resources**
  + **Auto-formatted citations** for articles & resources in MLA, APA, etc. from CatSearch & Google Scholar

# INSTRUCTION: Demonstrate with an example (10 mins)

* Show how to find library **databases by subject**: lib.montana.edu > Find > Articles & Research Databases > By Subject
* For additional help, show how to find online Guides by subject: lib.montana.edu > Find > Guides > By Subject
  + Many of these guides have suggested databases as well
* Choose a database, and show examples of the advanced techniques listed above

# **ACTIVITY: Database Speed Dating (15 mins)**

# WRAP UP (5 mins)

* Quick assessment of instruction
* Show resources on Online Guides again, and where to get help from the library: **Ask.lib.montana.edu**

Activity: Database Speed Dating

# PART A: Choosing a Database by Subject

**Directions**

* Write down your research topic.
* Go to the Database by Subject list, (Library Homepage > Find > Articles & Research Databases > By Subject).
* Identify the subject area(s) you think your topic falls under.
* Choose one (1) databases you think would be useful for your topic.
* Use the same keywords/combination to search in each database to compare results.

NOTE: make sure to use the exact same search in each database so you can compare.

**Your research topic:**

**Subject area (from list of Databases by subject):**

**The database I chose is:**

**What subject area(s) does it cover?**(If you are unsure check the information button next to the database title at <http://www.lib.montana.edu/resources/titles.php>)

**What date range does it cover? (**Check to see what the oldest available content is, and the most recent. Some databases may go back decades, some may be more recent.)

**What type of material does it cover?**(Does this database contain scholarly journal articles, magazine and newspaper articles, book chapters, conference papers, data, images, or personal papers? Anything else?)

**Geographic limits?**(Does the database cover international content, or is it limited? Does it cover a specific geographic area?)

# Part B: Database Pros and Cons

**Directions**:

* Go to the Database by Subject list, (Library Homepage > Find > Articles & Research Databases > By Subject)
* Choose a subject that you think your first database fits under
* Choose two (2) additional databases under that subject, and compare them to your first database

**Database #1:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Pros:**



**Cons:**



**Database #2:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Pros:**



**Cons:**



**Database #3:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Pros:**



**Cons:**



# Part C: Comparing Databases

**Directions:**

* Go to the Database by Subject list (Library Homepage > Find > Articles & Research Databases > By Subject)
* Open three (3) databases you think would be useful for your topic.
* Use the same keywords/combination to search in each database to compare results.

NOTE: make sure to use the exact same search in each database so you can compare.

**Keyword combination used to search in all three (3) databases:**

**Name of Database #1: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Total Number of search results:**

Overall rating: 1 2 3 4 5

Easy to search: 1 2 3 4 5

Easy to limit results 1 2 3 4 5

Useful limiters/filters (e.g. subject, date, etc.):

Relevant results: (article titles, authors, etc.):

**Name of Database #2: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Total Number of search results:**

Overall rating: 1 2 3 4 5

Easy to search: 1 2 3 4 5

Easy to limit results 1 2 3 4 5

Useful limiters/filters (e.g. subject, date, etc.):

Relevant results: (article titles, authors, etc.):

**Name of Database #3: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**Total Number of search results:**

Overall rating: 1 2 3 4 5

Easy to search: 1 2 3 4 5

Easy to limit results 1 2 3 4 5

Useful limiters/filters (e.g. subject, date, etc.):

Relevant results: (article titles, authors, etc.): W**hich database do you prefer overall? Why?**