LIBRARY RESEARCH GUIDE: MATHEMATICS AND COMPUTER SCIENCE
FALL 2024

General Tips for Searching E-resources
(Note: The following techniques usually work with online catalogs, periodical databases, reference databases, search engines, and other standard library resources)
- To search for exact phrases, enclose them within double quotation marks:
  - "south carolina"
  - "absolute value"
- To search for multiple endings of words, use an asterisk/star in place of the variant endings. This technique is known as "truncation."
  - symmetr* (retrieves "symmetry," "symmetries," "symmetrical," etc.)
  - educat* (retrieves "educate," "educated," "education," "educational," etc.)
- To find more than one term, use the "and" command. This command narrows your search.
  - "chaos theory" and control*
  - NOTE: Certain resources (e.g., Google) *assume* an "and" between multiple search terms, so you don't need to include one there.
- To find synonymous / equally acceptable terms, use the "or" command (and enclose the phrase within parentheses):
  - ("butterfly effect" or chaos)

Finding Reference/Background Materials
- You can find brief introductory articles in [Credo](#) and [Oxford Reference](#), reference databases made up of hundreds of individual reference works in all subject areas.
- Relevant print books are located here in the library's Reference Area:
  - Mathematics: 510s
  - Computer Science: 000s

Finding Books

- To find books, both print and electronic, in Converse's Mickel Library, go to our [Discovery Service](#), type your terms in the search box, and select "Converse Catalog"; to find borrow-able books in South Carolina college/university libraries, go to our [Discovery Service](#), type your terms in the search box, and select "PASCAL Delivers":
    - "damped oscillations"
    - "set theory" and "intuitionistic mathematics"
- To find books in libraries throughout the U.S., use [WorldCat](#).

Finding Articles in Scholarly Journals

- General/Multidisciplinary Databases
    - *[Academic Search Complete](#)* – indexes over 12k periodicals (mostly academic journals, but some popular magazines as well); over 8k of these titles include the complete text of the articles:
        - Sample search:
            - Note: this resource defaults to a "keyword" search.
            - "quantile regression" and "dummy variables"

- Subject-Specific Databases
    - *[Computer Source](#)* – indexes and provides abstracts for nearly 450 journals in computer science and provides the full text of nearly 300 of these.
        - Sample search:
            - "neural networks" and "data analysis"
    - *[General Science Full Text](#)* – indexes around 400 core scientific journals and provides the full text of articles from about 100 of these.
        - Sample search:
            - "random walks"
    - *[Applied Science and Technology Full Text](#)* – indexes and provides abstracts for over 800 journals in a wide range of applied science specialties, including computer science, information science, and engineering; provides the complete text of over 200 of these journals.

Finding "Articles, Books, and More"

Use the library's [Discovery Service](#) to search BILLIONS of journal articles, books, book chapters, and other types of resources from thousands of individual databases. In the search box, key in your search terms and select "Articles, Books, and More."

Finding Out If Our Library Owns a Particular Periodical

- To find complete articles for which you've found only a citation or abstract, you'll first want to click the "Periodicals by Title" link on the library's home page (in the "Research" section, within the "Discovery Service" category). Key in some or all of the journal's name (NOT the title of the article itself), and you'll see a listing of periodicals the library owns in electronic format as well as those it owns in print/physical format. For those in electronic format, their records will provide links to the database(s) that include(s) them. Occasionally these records will be incorrect or confusing; if you have any trouble determining whether the library has access to a particular journal article, please contact us through the "Ask a Librarian" service.

Using Interlibrary Loan/PASCAL Delivers

- Once you've determined that our library doesn't own a book or article (etc.) that you need, you're encouraged to go through either of the two services below to get it. We can borrow from among millions of resources held by thousands of libraries across the country.

- If you need a ***BOOK***, first check PASCAL Delivers by going to our Discovery Service, keying in your search terms and selecting "PASCAL Delivers." If you find the book there, click on it, sign in, and click on "Request via PASCAL Delivers." These books generally arrive within a few business days.

- If you need a ***BOOK NOT HELD IN PASCAL DELIVERS,*** or if you need an ***ARTICLE OR ANY OTHER NON-BOOK SOURCE OF INFORMATION,*** go to Interlibrary Loan and select the correct form. Articles generally arrive – sometimes in electronic format, sometimes in photocopied print format - within 2-7 business days. Books generally take a little longer: 5-10 business days.

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