Tutorial for professional database research

Search tips

for research in all databases

First-time user questions

Why use databases?

The library databases offer an access to professional information in different fields that is relevant for your study and goes beyond professional literature in our shelves.

Our professional databases contain primarily scholar articles in books and periodicals, university publications and studies, conference records, legal texts and standards. In short: numerous works to use for your assignments, term papers and degree theses.

Why is this better than using a common search engine like Google?

Our databases contain scholarly proved documents. Popular search engines like Google index all content available online, including a vast amount of articles written by laypersons, so you mostly don't know how reliable the information you get actually is.
So while the search interfaces of the databases are often more complicated (but also more effective!) than a search engine's simple search box, you can rely on the results and have scholar references.

These tutorials explain the various interfaces in detail and are oriented to provide you with the most successful search results. In case you still have some difficulties while searching, the library staff is there for you. We´ll be glad to help you.

What kinds of databases are there?

The two main types are:

- **Full text database**: Results from these databases provide the full text of an article to view or download.

- **Bibliographic database**: These databases do not provide any full-text documents, but so called bibliographical data: details about authors, included medium, publisher, unique document number as ISBN or ISSN, keywords, which describe relevant topic and possibly an abstract, which gives a short text summary. By means of this data, you can find the full text in the catalogs of libraries, document delivery services or booksellers.

Considerations before searching

If you still don't know what exactly you wish to find...

...write down details that characterize what you are looking for, for example:

- Approximate topics found documents should be about

- Terms and expressions that titles or abstracts may or should contain

- Time and date specifications: search for very recent information or from some particular time in the past

...search broadly. Use:

- Truncations (see below)

- Operators (see below)

- Features of specific databases to refine your search query afterwards

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Search strategies

In the search filed of a database, you can enter terms, which describe the topic of your search. At the same time, you can adjust or combine your search terms with following strategies, which will selectively broaden or limit your result list.

Truncations and wildcards

You can often get a more diversified result list by truncating, i.e. placing a certain wildcard character in front, into or at the end of a search term. In that way you will also find terms that contain your search term **as a part** only, or rather a grammatically **modified**, conjugated or declined **form**.

There are wildcards that substitute **any number** of characters, **including zero**…

Examples: `manage*`   finds „**manage**", „**manage**s", „**manage**rs", „**manage**ment" etc.
`*endable`   finds „s**endable**", „ext**endable**", „dep**endable**" etc.
`con*tr*ct*`   finds "**con**st**r**u**ct**ion", "**contr**a**ct**or", "**con**s**tr**i**ct**able", etc.

...and wildcards that substitute **exactly one** character.

Examples: `manage?`   finds „**manage**s", „**manage**r", „**manage**d" etc.
`??flection` finds „re**flection**", „in**flection**", „de**flection**" etc.
`pri?e`   finds „**pri**c**e**", „**pri**z**e**", „**pri**d**e**" etc.

You can also combine both wildcards:

Example: `comm?n*r` finds "**comm**un**i**cato**r**", "**comm**an**der**", etc.

➔ *The respective tutorial of a specific database explains if and on what conditions it supports truncations and which wildcard characters may be used.*

Operators

You can combine two or more search terms with so-called (boolean) operators in order to in- or exclude certain documents. Usually, these operators are:

- **AND**

- **OR**

- (AND) **NOT**

The combination with **AND** (in some German databases UND) is especially useful when, for example, the title should contain all search terms, but not necessarily in a specific order. Combine here, if possible, with a truncation in order to find also titles, which contain a modification of one of your terms.

For example: `manage* AND financ* AND sustainab*`

Use **OR** (in some German databases ODER) in order to find documents, which contain at least one of your search terms. Use the operator when e.g. you are looking for a topic, characterized by many keywords with the same meaning.

For example: `masonry OR brickwork`.

Use **NOT** (in some German databases NICHT) in order to exclude the search terms with a context, not relevant for your search. If you are e.g. looking up emission standards for machinery, you might come across some results about emissions banking. You can eliminate these results by excluding some terms related to the second, "unwanted" context.

For example: `emission* NOT bank*`.

Combine operators (and truncations) to search for precise subject matters. If you are looking for information on organic chemistry and need to exclude organic farming, this would be your input:

For example: `organic* AND chem* NOT farm* OR food*`

➔ *The respective tutorial of a specific database explains if and which operators can be used.*

Phrase search

In order to find a specific expression, you can enclose the query between characters – usually quotation marks – to define a search phrase.

Example: `"law of nature"`

This kind of query will only return documents containing your expression **exactly as you entered it**.

This kind of search can be especially very useful when looking up a particular author. Keep in mind, though, that the database record names are not the same, as you would enter. Sometimes last name is put first, middle name is recorded or left out, or only initials are recorded.

In order to include all kinds of written forms, you can usually combine operators and phrase searches.

Beispiel:

`"Jeff Smith" OR "Smith, Jeff" OR "Jeff P. Smith" OR "Smith, Jeff P." OR "J. P. Smith" OR "Jeff Patrick Smith"` etc. …

Databases that allow a combination of phrase search and truncation make this job easier:

`"J* Smith" OR "Smith, J*"`

This, however, will also find authors named Smith whose first names happen to start with J such as John, James, Jacob etc. as well.

➔ *The respective tutorial of a specific database explains if phrase search is supported and what characters are used to enclose the phrase.*