ADVANCED SEARCHING AT USF LIBRARY

BOOLEAN SEARCHING - USING AND, OR AND NOT

Boolean searches uses words called operators to create a search strategy which focuses on exactly the information needed. Explained below are the three most common operators, an explanation of how to use them and a sample search strategy. Boolean operators can be used in combination and often make use of term grouping with parentheses.

**AND**

Use the AND operator when each result must contain all the search terms. This is operator is most often used when comparing two separate concepts.

Scenario: You are looking for information that quantifies the health benefits of chocolate. Your search strategy could begin with either of the following searches:

- chocolate AND health
- chocolate AND “health benefits”

**OR**

Use the OR operator when each result needs to contain at least one of the search terms. This is often used when searching for terms that have another common synonym.

Scenario: You are looking for information on youths aged 9-16, which fall into three commonly named age groups. Your search strategy could begin with the following search:

- teens OR adolescents OR tweens

**NOT**

Use the NOT operator when results must not include a certain word. This is most often used when there is are two meanings to a single term to remove one of its meanings from the results list. It is also sometimes used as AND NOT.

Scenario: You are looking for information on viruses, the biological kind, but keep having your results contaminated with information on computer viruses. Your search strategy could begin with the following search:

- virus NOT computer

**COMBINING BOOLEAN OPERATORS**

Using the AND, OR, NOT operators in combination can help narrow a search further, but often requires the use of parentheses to group terms.

Scenario: You are looking for information on viruses in children ages 9-16 but don’t want to have to sift through and remove items dealing with computer viruses. Your search strategy could begin with the following search:

(teen OR adolescent OR child) AND virus NOT computer
**More Searching Tips and Tricks**

Many databases and catalogs use unique search terms to create an advanced search. This handout will cover some of the more commonly used search strategies to create an advanced search in various databases or catalogs.

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<tr>
<th>Explanation</th>
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<th>Wildcard</th>
<th>Search For A Phrase</th>
<th>Group Terms</th>
<th>Term Must Be Present</th>
<th>Term Must Not Be Present</th>
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<tbody>
<tr>
<td>Searches the root word and allows for any endings or conjugation.</td>
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<td>The symbol replaces any one or sometimes more than one letter in the search term.</td>
<td>Searches for the exact terms in the exact order they were entered.</td>
<td>Searches with Boolean operators to group terms.</td>
<td>Creates a search where one term within a group of terms must be present.</td>
<td>Creates a search where one terms within many must not be present.</td>
</tr>
<tr>
<td>Symbols Used</td>
<td>In the USF catalog: ? In most databases: *</td>
<td>Not available in USF Catalog. Most databases: ?</td>
<td>Terms are placed in quotation marks “---”</td>
<td>Grouped terms are placed within parentheses (- -)</td>
<td>Not commonly seen in the databases. In the USF Catalog: +</td>
<td>Not commonly seen in the databases. In the USF Catalog: !</td>
</tr>
<tr>
<td>Example</td>
<td>Catalog: child? Databases: child*</td>
<td>wom?n</td>
<td>“To each his own” autism AND (baby OR child)</td>
<td>recipe +granola</td>
<td>virus</td>
<td>!computer</td>
</tr>
<tr>
<td>The search will include:</td>
<td>Child Children Childhood...</td>
<td>Women Woman</td>
<td>Only items containing the exact phrase. Only items containing <em>autism</em> and <em>baby or autism</em> and <em>child.</em></td>
<td>Includes only items where <em>granola</em> is present.</td>
<td>Only results in items where <em>virus</em> is present but not <em>computer.</em></td>
<td></td>
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