Basic Search Tips and Advanced Boolean Explained

Please feel free to refer to this guide while doing the exercises of this course.

<table>
<thead>
<tr>
<th>BASIC SEARCHING</th>
<th>EXAMPLES</th>
</tr>
</thead>
</table>
| **Quotation marks**<br>“ ”  | • Requires words to searched as a phrase, in the exact order you type them.  
   “working mothers”  
   “affirmative action” |
| **Common Words Usually Ignored**<br>+ or “ ”  to search them | • Search which versus that. Only versus is searched on. Which and that are ignored.  
   • To require common words to be searched:  
   +which versus +that  
   “which versus that”  
   “acute pancreatitis” diet -cat -dog -“pancreatic cancer” |
| **Excluding**<br>-word  
-“phrase in quotes” |  
| **OR** allows more than one term | • OR requires at least one of the terms joined by it to appear somewhere in the document, in any order.  
   “african americans” OR blacks  
   ear OR nose OR throat  
   • The more words you enter connected by OR, the more documents you get.  
   • USES:  
   o The OR operator is generally used to join similar, equivalent, or synonymous concepts.  
   ”global warming" OR "greenhouse effect"  

[Diagram of OR: dogs OR cats allows pages with at least one of the terms]

| **AND** (default) | • AND is the default and only needs to be typed if you are using other Boolean operators with ( ).  
   infopeople training  
   is logically the same as infopeople and training  
   • The more words you enter connected by AND, the fewer documents you get. All your words will be searched on  
   • USES:  
   o The AND operator is generally used to join different kinds of concepts, different aspects of the question.  
   o "global warming" AND "sea level rise" AND california |

[Diagram of AND: dogs AND cats is the small overlap where both terms occur]
## Advanced Boolean Explained

<table>
<thead>
<tr>
<th>OPERATOR</th>
<th>WHAT IT DOES &amp; WHEN TO USE IT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AND NOT</strong></td>
<td></td>
</tr>
</tbody>
</table>
| ![Diagram](image) | • Excludes documents containing whatever follows it.  
• The AND NOT operator is generally used after you have performed a search, looked at the results, and determined that you do not want to see pages containing some word or phrase.  
• USES:  
  o The AND NOT operator should be used with extreme caution, because it eliminates the entire page, and some pages may be of value to you for other information they contain. I almost never use and not for this reason.  
  o "global warming" AND "sea level rise" AND NOT california - The first two terms must be somewhere and any page containing california will be thrown out.  |
| **NEAR** | | |
| ![Diagram](image) | • Requires the term following it to occur within a certain proximity of the preceding word in the search. In Exalead.com, NEAR requires the terms to be within 16 words of each other in either direction.  
• Joining words by NEAR gives you fewer documents than AND, because it requires the words to be closer together.  
• USES:  
  o The NEAR operator is used when you want to require that certain terms appear in the same sentence or paragraph of the document.  
  o "global warming" NEAR "sea level rise" - Requires the two phrases to occur within 16 words of each other, in either direction.  |
| ( ) parentheses: "Nesting" | • Require the terms and operations that occur inside them to be searched first. This is called "nesting."  
• Parentheses MUST BE USED to group terms joined by OR when there is any other Boolean operator in the search.  
  o "global warming" AND "sea level rise" AND (california OR "pacific coast*") - Requires first two terms somewhere in all documents, and either california or pacific coast.  
• Parentheses also MUST BE USED with NEAR:  
  o ("global warming" NEAR "sea level rise") AND (california OR "pacific coast*") - Requires sea level rise to be within 16 words of global warming; the rest can be anywhere in the pages. The parentheses guarantee that the effect of near stops with sea level rise.  |

You do not need or even want to get very complicated with Boolean searching in web searching. Searching the web is free, and several simpler searches take less time than a humongous search. Moreover, with complicated searches, you often don't know which parts of the search worked and which did not. Simpler searches can more easily be compared with one another, and you know what worked.