Using Boolean Operators

Database commands, or “Boolean operators”, are terms used to define the relationship(s) between keywords in a search. They can combine or exclude keywords in a search, effectively expanding or narrowing your search results. When conducting research, appropriate use of the following operators will save you time and effort by producing more targeted results.

Use **DIRECT QUOTES** ("    ") to:
- Search words quoted in that **exact** order

Use **AND** to:
- Narrow your search
- Tell the database that **ALL** keywords must be present in the results
- Example: cloning AND humans AND ethics

Use **OR** to:
- Broaden your results
- Tell the database that **ANY** of your keywords can be present in the results
- Example: cloning OR genetics OR reproduction

*The results generated will be a combination of all three search words*

References:
Adapted from: [http://libguides.mit.edu/c.php?g=175963&p=1158594](http://libguides.mit.edu/c.php?g=175963&p=1158594)
Use **NOT** to:
- Narrow your search by *excluding* words
- Tell the database to ignore concepts that may be associated with your keywords
- Example: cloning **NOT** sheep

**Ordering of Commands:**
- Databases usually recognize **AND** as the primary operator, & will connect concepts with **AND** together first.
- If you use a combination of **AND** and **OR** operators in a search, enclose the words to be "**ORed**" together in parentheses.

**Examples:**
- ethics AND (cloning **OR** reproductive techniques)
- (ethic* **OR** moral*) **AND** (bioengineering **OR** cloning)

**Boolean Operators** are simple words (**AND**, **OR**, **NOT** or **AND NOT**) used as conjunctions to combine or exclude keywords in a search, resulting in more focused and productive results.

**References:**
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