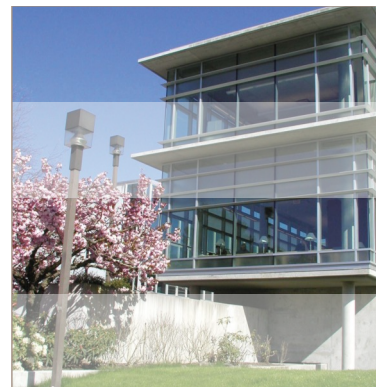


GOOGLE POWER SEARCHING

BRITISH COLUMBIA
INSTITUTE OF TECHNOLOGY

BCIT LIBRARY

bcit.ca/library



This session is based on a conference workshop presented by Holly Gunn, a teacher-librarian in Halifax, Nova Scotia. She developed a course for high school students to introduce them to the advanced features of **Google**. This version has been condensed and adapted for use at the BCIT Library.

Why Google?

- > Search engine of choice for majority of people.
- > Impressive size and scope.
- > Google has many useful special features and strives to enhance services frequently.

How Google Works

- > Uses a program called Googlebots to visit websites and follow links to other sites.
- > Creates an index of page words and addresses on hundreds of computers to ensure fast results.
- > Stores data and matches user keyword searches to index.
- > Uses a method called PageRank to rank pages according to the number of links to it from other pages, the quality of linking sites, number of times keyword appears on page and, placement of words on page, proximity of words to one another.

Reminders

Some things to keep in mind while you search Google:

- > Use quotation marks when a phrase search is appropriate, i.e. "*Queen Elizabeth II*".
- > Google has a 32 word limit.
- > Google uses stemming technology so it will find variant forms of words i.e. if you search for dietary it will look for diet and other forms of the word
- > Use the **I'm Feeling Lucky** button to find the most popular site for a subject. For example if you type in *Vancouver 2010* and hit this button it takes you to the Official site for the Vancouver 2010 Olympics.

TIP #1 SEARCH WEBSITE TITLES

For a more precise search, you can search for words in the title of a website by using the commands **intitle:** or **allintitle:**.

Examples:

intitle:diabetes obesity children

allintitle:global warming climate change



DID YOU KNOW...

Google Sky Map allows you to point your Android phone at the sky to view the stars and constellations above you. Android phones will be available in Canada June 2, 2009.

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TIP #2 ELIMINATE COMMERCIAL SITES / SEARCH SPECIFIC DOMAINS

Eliminate commercial sites from your search by adding **-.com** at the end of your search. Confine your search to a particular domain by adding **site:edu**, **site:org**, **site:gov**, etc. to your search.

Examples:

steroids -.com

chocolate site:edu

TIP #3 FORMAT SPECIFIC SEARCHING

Search for particular file types by adding the command **filetype:** to the end of your search. This allows you to limit your search to Adobe Acrobat documents (**pdf**), PowerPoint presentations (**ppt**), Excel files (**xls**), Microsoft word documents (**doc**) and others.

Examples:

iphone filetype:pdf

how google works filetype:ppt

TIP #4 SEARCH WITHIN A URL

The URL is a searchable field in Google with the **inurl:** command.

Examples:

plagiarism inurl:ubc

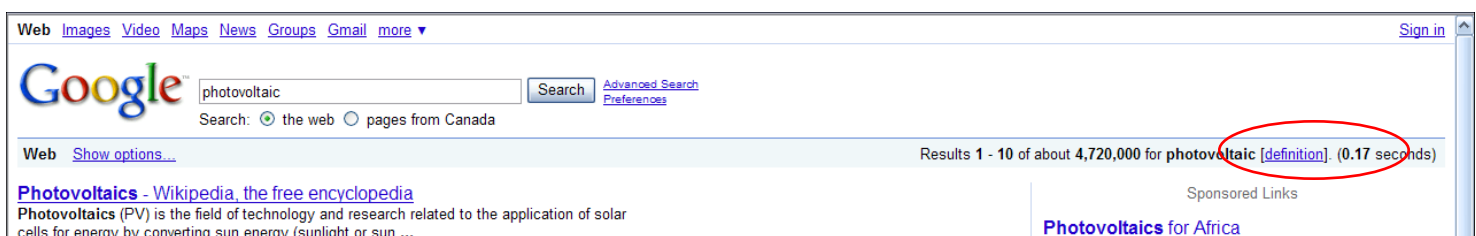
green roofs inurl:bc

EXERCISE 1

1. Construct a search that ensures that the phrase **genetically modified food** is in the **title** of the Web page and only retrieves sites in **pdf** format. How many results did you get?
2. Find information about **David Suzuki** that comes from the **CBC** web site. What is the title of the first Web page in the result list?
3. Search for information on **fuel cells** from **government (gov)** sites. What is the url of the first page on the list?

TIP #5 FIND DEFINITIONS

There are two ways to find definitions using Google. One is to type in a word and click on the definition link.



Two- find definitions for words or phrases on the Web using the **define:** command. There is no need to use quotation marks for phrases when using the define command.

Examples:

define:photovoltaic

define:distributed learning

TIP #6 USE GOOGLE ADVANCED SEARCH

Google's **Advanced Search** lets you fill in the blanks to perform power searches without knowing the commands. This search will find sites in **pdf** format with **buying digital camera** in the **title** of the Web page. These sites will have been updated or added in the **past year**.

Google Advanced Search - Windows Internet Explorer

http://www.google.ca/advanced_search?hl=en

File Edit View Favorites Tools Help

Google Advanced Search

Web Images Maps News Video Gmail more

deirdregracester@gmail.com | Web History | My Account | Sign out

Google Advanced Search

allintitle: buying digital camera filetype:pdf

Find web pages that have...

all these words: buying digital camera

this exact wording or phrase: [tip](#)

one or more of these words: [tip](#)

But don't show pages that have...

any of these unwanted words: [tip](#)

Need more tools?

Results per page: 10 results

Language: any language

File type: Adobe Acrobat PDF (.pdf)

Search within a site or domain: (e.g. youtube.com, .edu)

[Date, usage rights, numeric range, and more](#)

Date: (how recent the page is) past year

[Usage rights:](#) not filtered by license

Where your keywords show up: in the title of the page

Region: any region

TIP #7 USE GOOGLE ADVANCED IMAGE SEARCH

Google's **Advanced Image Search** allows you to search for specific types of images. You can specify size, color and file type of the image. You can also search specifically for photos, clip art, line drawings, faces and news content. This search will find **large full colour photos** of **Stanley Park**.

Google Advanced Image Search

Find results

related to all of the words

related to the exact phrase stanley park

related to any of the words

not related to the words

Google Search

Content types

Return images that contain

any content news content faces photo content clip art line drawings

Size

Return images that are large

Exact size

Return images exactly the size Width: Height:

Filetypes

Return only image files formatted as any filetype

Coloration

Return only images in full color

Domain

Return images from the site or domain

SafeSearch

No filtering Use moderate filtering Use strict filtering

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EXERCISE 2

1. Use Google to find definitions for the phrase *peer review*. What is the URL for the source of the first definition in the list?
2. Use the **Advanced Search** feature to find information on the use of *technology* in *higher education* from a web page that was updated in the *past year*. **Tip: search for the terms in the title of the Web page.** How many results does the search produce?

Research Tools

GOOGLE NEWS

(<http://news.google.com>)

You can access **Google News** from the **News** tab on the Google main search page or by going direct to the site. This is an excellent place to find free newspaper articles gleaned from over 4500 news sources. The page is updated several times an hour. You can customize the page to suit your information needs. **Google News** is searchable and there is an **Advanced News Search**. Click on **Sort by date** to get the most recent stories. For articles published more than a month ago, use the **News Archive Search**. Use the **Timeline** feature to track a story over time. **Note that if you use google.ca instead of google.com the content will differ.** This search will find news items about *BCIT* published in the *past month*. **Google** recently announced a partnership with newspaper publishers to digitize millions of pages of news archives. These articles will appear exactly as they were printed. Content is minimal to date but will increase over time.

The screenshot shows the Google News Advanced Search page. At the top, the Google logo is followed by 'Advanced news search' and a link to 'About Google'. Below this is a search bar with the text 'bcit'. To the right of the search bar is a dropdown menu set to 'Sort by relevance' and a 'Google Search' button. Below the search bar are four radio buttons for finding results: 'with all of the words', 'with the exact phrase', 'with at least one of the words', and 'without the words'. The 'with all of the words' option is selected. Below these are fields for 'Date', 'News source', 'Location', and 'Occurrences'. The 'Date' section has two options: 'Return articles published past month' (selected) and 'Return articles published between 7 Jan and 6 Feb'. The 'News source' section has a field for 'Return only articles from the news source named' with the example 'e.g. CNN, New York Times'. The 'Location' section has a field for 'Return only articles from news sources located in' with the example 'A country or a U.S. state'. The 'Occurrences' section has a dropdown menu set to 'anywhere in the article'. At the bottom of the page is the copyright notice '©2007 Google'.

GOOGLE SCHOLAR

(<http://scholar.google.com>)

Use **Google Scholar** to search for scholarly literature including peer-reviewed articles, theses, and books. It is important to note that **Google Scholar** is not comprehensive. It is limited to the material from the publishers, academic societies and universities who have agreed to make their information accessible from Google. There is also limited full-text and the frequency of updating is unknown. It is still, however, a good starting point for research. Use it in conjunction with Library resources to find the best information. There is an **Advanced Scholar Search** option for more precise searching. You can also use it to search for a specific article to see if the full-text is available.

Examples:

allintitle:lifelong learning; published between 2000 and 2009.

Search for the article called *The Aging Process*.

GOOGLE BOOK SEARCH

(<http://books.google.com>)

Google Book Search allows you to search within the full-text of books to find information of interest. **Full view** is available for books that are out of copyright but for most books you will see only sample pages or snippets. You can limit your search to **full view** books to see those books that are available online in their entirety. Once you find a book that interests you, it is possible to **search within a book**. There are links to reviews and online bookstores as well as a **Find this book in a Library** option. Google recently announced a mobile version which will give people access to public domain books using an **iPhone** or Android phone. Available at <http://books.google.com/m>.

Where in the world?

GOOGLE MAPS AND GOOGLE EARTH

(<http://maps.google.ca> and <http://earth.google.com>)

Google Maps will help you find services and businesses in an area. You can get addresses, phone numbers and directions as well as street maps or satellite images. Street level photos are available for selected U.S. and European cities. Drag and drop the yellow pegman to the area you want to view. There is also a **Terrain** view which shows physical elevation and street names. **Hot off the press: Google Maps now links to photos, video and Wikipedia articles.** Click on the **More** button to access these features. **Google Maps for Mobile** allows you to download **Google Maps** to your cell phone or PDA. **Google Earth** is free downloadable software that allows you to explore the world through 3D satellite imagery. You can explore an area by clicking on the globe or typing in specific locations.

Exercise 3

1. Using the **Advanced Scholar Search** option in **Google Scholar**, locate articles **published between 2002 and 2009** that have the words **avian flu** in the **title**. Is the full-text of the first article available for you to read?
2. How many times has the second article in the list been cited by other articles in **Google Scholar**?
3. Use the **Advanced News Search** to find articles about **Barack Obama** that were published in the **National Post** in the **past week**. How long ago was the first article in the list published?

Fun Stuff

- > To get a stock quote, type **quote** and the stock symbol e.g. **quote goog**
- > Perform conversions e.g. 32 Celsius in Fahrenheit; 1600 metres in miles
- > Solve a math problem e.g. 4 x 33/2

GOOGLE ACCOUNT

Creating a free **Google Account** gives you access to a number of features including:

- > **Gmail** – searchable Web based email
- > **Google Alerts** – track new Web information on topics of interest
- > **Google Groups** – participate in discussions on various subjects
- > **Web history** – keep a record of your Web searches
- > **Google Reader** – subscribe to Web sites with RSS or Atom feeds so you will know when new content is posted
- > **iGoogle** – personalize your Google home page
- > **Calendar** – online shareable calendar
- > **Google Docs** – web-based word processing, presentation, spreadsheets software – can be shared – useful for coordinating group assignments
- > **Google Talk** – communicate with friends by IM, email, free voice calls (download required)
- > **Google Notebook** – clip and organize useful information found on the Web
- > **Google Sites** – create and share a group web site
- > **Custom Search** – create a search engine tailored to your needs
- > **Google Latitude** – share your location and see where your friends are. Gmail required.
- > **Google Health** – store, organize and share your medical records

Register by sending your email address and creating a password. Many of these products are still in beta so they are being tested and improved.

GOOGLE MOBILE

Many of these products are available for mobile devices. These include Maps, Gmail, News, Calendar and more. With Google Sync, you can synchronize your contacts and your calendar on your phone. Find out which devices are supported and more at google.com/mobile.

AND THAT'S NOT ALL!

Google Finance (<http://finance.google.com>) provides news, stock information and other financial data for many North American public and private companies. With a Google account you can use it to maintain a stock portfolio.

Google Patent Search (<http://www.google.com/patents>) allows you to search the full-text of patents issued by the U.S. Patent & Trademark Office. Drawings are included.

Google Blog Search (<http://blogsearch.google.com/>) performs searches specifically on blogs. With a Google Account you can create your own blog using Blogger.

Google Chrome (<http://www.google.com/chrome/>) is an internet browser available as a download. This alternative to Internet Explorer and Firefox is still in BETA.

PUTTING IT ALL TOGETHER

Google recently launched **Universal Search** which means that search results may now contain **Books, News, Images** and **Videos** as well as traditional text links. Try searching **ufos** for a good example of how this works. There is also a Web site that puts all of Google's features on one page. Take a look at www.soople.com.

You may also have noticed **Sitelinks** which is a set of links below some search results that lets you jump to useful pages deeper within a site. A search box is sometimes included. Search **bcit** to see how this works.

Google Search Options allows you to refine your search by category, time and other characteristics. Click on the "show options" link to view this feature.

FURTHER READING

For a full list of features available from Google visit the **Google Services** page at <http://www.google.com/options/>. Click on **Web Search Features** to find even more neat stuff. You can also look at things Google is working on if you visit **Google Labs** at <http://labs.google.com/>. Within Google Labs you will find **Google Experimental** where you can test drive things that Google is working on and give your input. There is a printable **Google Guide** at <http://www.googleguide.com>.

The following sites are useful for keeping up to date with changes in Google and other Internet developments:

<http://searchenginewatch.com/>

<http://www.researchbuzz.org/wp/>

<http://www.resourceshelf.com/>

These books are available in the BCIT Library for further reading:

Google hacks by Tara Calishain and Rael Dornfest. TK 5105.885 G66M55 2007

Google power tools bible by Ted Coombs. TK 5105.885 G66C67 2007

Google.pedia : the ultimate Google resource by Michael Miller. TK 5105.885 G66M55 2007

Google powered: productivity with online tools by Jerri Ledford. ZA 4234 G64L43 2007

Google talking by Brian Baskin. 2007 ebook

Google scholar and more by William Miller and Rita M. Pellen. Z 674.75 I58 G66 2009