

## IE 665 HOMEWORK#1: Due in two weeks LITERATURE REVIEW ASSIGNMENT

The objective of this assignment is to research a topic of interest in ergonomics. A secondary objective is to get acquainted with NJIT's on-line Library resources that are useful for researching a topic of interest.

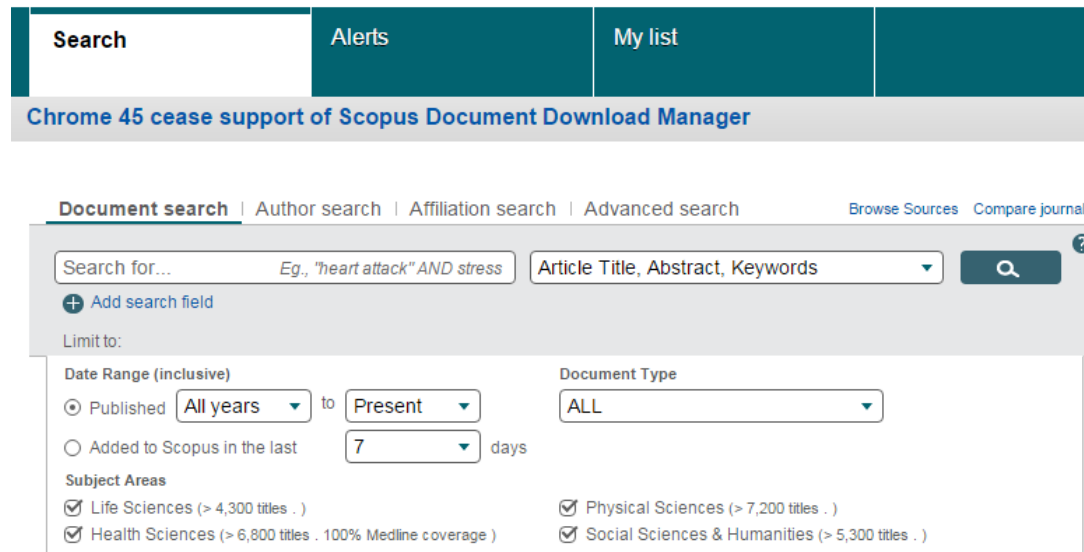
NJIT Library resources can be accessed from NJIT home page ([www.njit.edu](http://www.njit.edu)). Select the **EDUCATION** tab, and then select **Van Houten Library** menu. This will take you to the NJIT Library home page (**Figure 1**). From this page you can select "FIND DATABASES" tab. Click for the dropdown menu and select **Scopus** and press the submit button.



**Figure 1. NJIT Library home page**

Provide uid and password if necessary. Scopus page (Figure 2) lets you search for documents using keywords in one more fields. By default, Scopus opens with one search field, as shown in Figure 2. You can add more search fields by pressing the '+ Add search field' button. The search word(s) that you enter, may be searched in

### Scopus



**Figure 2. Scopus page**

Provide one or more Keyword(s) and select the search field type from the drop down menu at the left. For example, if I want to search for documents whose title contain “touch screen” in “ergonomics” related journals, then I would put “touch screen” as keyword and select document title field, and “ergonomics” as the keyword, select source title as the search field, and combine the two keywords with an “and” logic. The search will produce a list of all documents whose title include the words “touch” and “screen”, and the name of the source publication contains the word “ergonomics” (Figure 3).

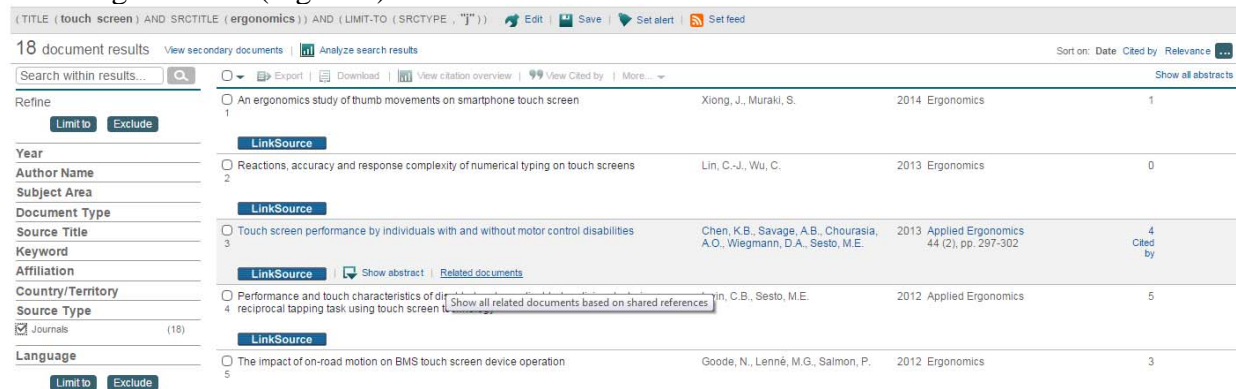


Figure 3. Scopus search result screen

Depending on your search, Scopus may come up with a very large list of documents as the search result. That list can be further narrowed down by using the options given under “Refine Results” to the left of the list. You can refine your results using Year, Author Name, Document type, source title, etc. **You should refine using “Source type” as Journal**, which will make sure you are only getting journal articles.

Each document in the search result will show the title of the document, its authors, its year of publication, source title, and number of articles “cited by”. Clicking on the cited by link, will show those articles. You can also select the checkbox to the left of the article, and use the menus Export | Download | View citation overview | View Cited by | More... to perform various tasks. In the More drop down menu you can use function such as “View references”, “Add to My List”, “Create bibliography”, “Email”, and “Print” function.

Each document will also have tabs “Link Source”, “show abstract” and “related documents”. Clicking on “Link source” tab will show you availability of full text version of the article. If NJIT has the electronic access to the journal, then you can follow the link, find the article and download it in PDF format for further reading. **International Journal of Industrial Ergonomics, and Applied Ergonomics**, are two reputed journals of ergonomics, which NJIT Library subscribes for electronic full text versions. “Clicking on the “show abstract” button, will show the abstract of the document in the list. Clicking “related documents” will bring up all articles that share some references.

The above is a brief description of the electronic search procedure. If you need further help, you can make an appointment with the reference librarian at NJIT library, for guidance.

In this assignment you will do a literature search to research a topic in the general area of ergonomics. Some of the suggested topics are : “office workstation”, “cellular phone”, touch screen”, “computer work”, “workstation design”, “manual lifting”, “checkstand design”, “heart

rate”, “hand tool”, “posture analysis”, “chair design”, “truck driving”, “vibration”, “heat stress”, “tool design”, “musculoskeletal disorder”, “back pain”, “repetitive strain injury” or you can use a keyword based on the main topics from your text book or any topic in ergonomics of your interest. **You can also glean through recent publications in “[International Journal of Industrial Ergonomics](#)”, and “[Applied Ergonomics](#)” to get an idea of current research interests.**

Using Scopus or some other databases, try to find an article that seems to be the most interesting to you download the full text of the article. The article must be:

- (1) Published in a journal whose name includes the term “**ergonomics**” or in the field of ergonomics. *Articles not published in scholarly journal web are **NOT** acceptable*
- (2) The article should preferably discuss an **experimental study**

Once you have made the final selection, read the article thoroughly to write a critique of the article in your own words.

Your critique should include the following:

- Research objective of the article
- How the importance of the research has been established by the authors in the introduction of the articles.
- Describe the experimental method
- What were the main results and conclusions
- What is your critique about the research?
  - What are the strength of the research
  - What are the weaknesses
  - Does the result have a practical value?
  - Any other criticism?
- What can be done to advance the research?

Your report should be typed; **double spaced** and should be about two pages. Attach the article you are critiquing with your report.