

Lab template/Example report Courses LI1011/LI1021 (1.5hp) and LI1101 (3hp)

Summary: This template is an example on how to report the assignment in this course. It is recommended, although not requested, that you follow this design.

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What happens when a strong magnetic field is applied to a 2D electron system surface at low temperatures? (Title of Search question)

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Information Retrieval LI1XYZ, DDMMYY (Course name, course code and date.)

[And for students working in groups of two, include a detailed statement describing the division of the work done, example: The assignment has been completed in the following way. Student X has done the searching in ... and writing ... Student Y has done the searching ... We have together done the work with ..., analysing ..., searching in... and writing the text in ...]

[page break]

Databases used

Compendex, Scopus and Pedro (accessed 2013/09/01 via http://www.pedro.org.au/). (State the full name of each database and, if you judge that it is necessary, access details.)

Search description (1.5 - 2 A4 pages, 11pt, single spacing)

Describe how you thought when you were searching. How did you formulate your first search query? Why did you use those words? Also describe how your search logic evolved with time! Remember that you are to go through an iterative process where you:

- come up with or find search words;
- do a search;
- evaluate the list of search results; and
- revise your search logic and repeat the search.

Then you repeat this process sufficiently many times until the result is satisfactory. Do not forget that a search session almost always has to be *iterative* to be successful. This requires you to make structured modifications with additional terms, with revisions of search queries being done systematically in light of previous search results.

When reporting, try to answer the following questions. What new words did you find to improve your search? Did you use any thesaurus terms? How did you include the new words in your earlier search strings in order to retrieve more relevant material? How did you use the databases in order to meet your information need?

You need to analyse your work using the concepts from the lectures and the material in the course. Compute the *precision* and try to estimate the total *recall* for your set of search results. You should also discuss concepts covered by the course such as *synonym*, *thesaurus*, *truncation*, *stemming* and other database specific search tools that you have used.

Discussion of the databases used (0.5 - 1 A4)

In this part of the search report you are to evaluate the databases that you used. Answer the questions:

- Why did you choose these databases?
- Which one seems to have had the most information on your subject?
- Which one seems to have the "best" information?
- How well did the search tools work?

Discussion concerning your information need (0.5 - 1 A4)

In this part you need to discuss how close you think you have come to meeting your information need. Do you think there could be more relevant information to be found? If so: how would you obtain it? Write down how you reasoned when you chose the references that ended up being a part of your report. Contrast this to your information need and explain why the reference list below satisfies your information need. Also discuss this from a source-critical perspective - how "good" and "usable" do you consider your set of search results to be?

References

You shall include *all relevant sources* found, presented in a *complete and correctly formatted reference list* at the end of the document.

It is recommended to use EndNote, Zotero, Mendeley or BibTeX to manage your references. This will make things so much easier for you... ② ...since you will not pass the course if the references are not complete according to an ISO-standard or not uniformly formatted according to one bibliographic style (such as IEEE, Harvard, Oxford, etc.).

You can cite in the text like this: [1, p. 42] or [2, in particular Subsection 47.11] or [3], depending on exactly what part(s) of the source you are citing.

Literature review (2-4 A4 pages) [Only to be included for students taking LI1101, 3 credits, and then only in the final version submitted after Lab 3]

For this section we refer you to the course material in Bilda on how to write a literature review, including content, structure and language requirements. Remember that you are aiming to write a *scientifically reflecting* text with the aim of solving the question you stated when formulating your information need, *critically reviewing and analysing* the results stated in your sources. Only *re-telling* the sources in your own words will not suffice for a Pass grade.

Reference list, example (always included)

- [1] C.J. Anderson, M. Glassman, R.B. McAfee & T. Pinelli. An investigation of factors affecting how engineers and scientists seek information. *Journal of Engineering and Technology Management*, 18(2):131 55, 2001/06/.
- [2] C.M. Brown. Information seeking behavior of scientists in the electronic information age: Astronomers, chemists, mathematicians, and physicists. *Journal of the American Society for Information Science*, 50(10):929–943, 1999.

[3] Goncalves, C.R.B. de Souza & V.M. Gonzalez. Initial findings from an observational study of software engineers. Proceedings of the 13th International Conference on Computer Supported Cooperative Work in Design, pp. 498 – 503. Piscataway, NJ, USA, 2009.