



## Course report – Faculty of Librarianship, Information, Education and IT

<b>Name of course:</b> Information retrieval 1	<b>LADOK code:</b> C3LIR1
<b>Number of higher education credits:</b> 7.5 credits	<b>Period (e.g. P1 2018):</b> P1-2 autumn 2018
<b>Within study programme or alt. single-subject course:</b> Master's programme: Library and Information Science, Digital Library and Information Services (BMDD1)	

### *Comments about response rate for the student evaluation*

4 out of 45 registered students have answered the course evaluation questionnaire.

### *Analysis of:*

#### **Student results and student performance on the course**

45 students were registered on the course. At the end of the course 7 students (16%) had finished all course components. The grades for the entire course were distributed as follows:

Grade A: 0 students

Grade B: 2 students

Grade C: 2 students

Grade D: 2 students

Grade E: 1 student

The proportion of registered students who have finished the course at the end of the course period is noticeably low. If we investigate the course components, we find that considerably fewer students than the number of registered students have submitted at least one of the examination tasks. This is probably an indicator of actual activity on the course. The course is divided into two course components: *Assignment: written assignment*, which is a practical text mining task, and *Examination: home examination*. 10 students submitted a report for the *Assignment: written assignment* task in the first submission round, and 8 passed. 13 students submitted a report on the *Examination: home examination* course component in the first submission round and 12 of those passed.

### **How the course contents, teaching and examination have supported student learning**

The answers to the question as to whether the teaching on the course has supported the student's learning are very mixed, and no solid conclusion can be made. 25% of the respondents have answered "Do not agree at all", "Partly agree", "Broadly agree", and "Completely agree" respectively. However, the impression of the course literature is somewhat more homogeneous with 50% of the respondents giving the answer "Partly agree" and 50% answering "Broadly agree" to the question as to whether the course literature and other materials have supported the student's learning.

The answers pertaining to the examination modes give a more perplexing picture. 50% answer "Do not agree at all" and 50% "Broadly agree" to the question as to whether the examination modes have supported the student's learning. The reasons behind this divided picture of the examination modes can only be speculated upon. It could for instance be the case that the practical assignment and its role on the courses would have need clearer instructions. However, 75% of the respondents answer "Broadly agree" or "Partly agree" to the question as to whether the course examinations were relevant in relation to the course objectives, which is an indication that the rationale behind the integration of the examination tasks has been relatively perspicuous.

Regarding the perceived support from the teachers on the course, 50% answer "Do not agree at all" and 50% answer "Broadly agree" to the question whether the teachers on the course have supported their learning. The same distribution of answers is found with regard to the question concerning whether the teaching modes were relevant to the student's learning. Since there are no comments given to any of the questions, a tentative explanation of this result is not possible to give. It could be the case that some students would have received the lectures as recordings, as a complement to the teaching provided in the residential period, but this can only be a speculative answer since no hints are given in the course evaluation, the discussion forum or any other mode of communication.

### **How the course has been linked to research**

75% of the respondents answer "Broadly agree" and 25% answer "Do not agree at all" to the question as to whether they have gained an increased knowledge of research within the disciplinary domain of the course. A somewhat different picture is obtained from the answers given to the question concerning whether one's understanding of research has increased through the course. Regarding this question, 50% have answered "Do not agree at all" and 50% have answered "Partly agree". The related question as to whether the respondent perceives that the academic approach has been developed through the course has received 75% of the answers on the alternatives "Partly agree" or "Broadly agree". Also with regard to this aspect of the course it is difficult to discern a clear pattern. It might be the case that the course somewhat successfully, on a theoretical level, has conveyed the basic problems and ideas of information retrieval research, but that a practical understanding of how information retrieval research is conducted has not been obtained.

A recurring comment in related course evaluations is that it would be desirable to get a deeper insight through course in ongoing IR research. An increased focus on the research process, however, would also require greater preparatory work to lay the groundwork for the perception needed to understand current research in information retrieval. The purpose of the practical task is also to provide a deeper understanding of how text can be analyzed mechanically as preparation for operational use in search processes.

### **How the course has worked in relation to other courses in the study programme**

75% of the respondents have answered “Broadly agree” or “Completely agree” to the question as to whether the course fits into the study programme. In addition, 25% of the respondents answer “Completely agree” and 75% answer “Partly agree” to the question whether their prior knowledge was sufficient to grasp the course content. Points that have been raised in related course evaluations are that one’s mathematical knowledge needed to understand parts of the course content is perceived as insufficient. However, how this is best addressed in the framework of the study programme is an open question. It is the teachers’ perception that the course could have been co-ordinated with similar courses within knowledge organization and quantitative research methodology to introduce a common theoretical foundation together with the associated formalism.

### **How the course resources have been utilised and experienced**

50% of the respondents answer “Partly agree” and 50% answer “Broadly agree” on the question concerning whether the course literature and other course materials has supported the student’s learning. A tentative conclusion is that the course book together with the additional material provided in the course module is adequate for the learning of the course content, despite the considerable mathematical and technical level of the content.

The teaching on the course has primarily been confined to limited teaching period during the initial part of the course (a so-called residential period) during which three teachers participated in different lectures. These lectures have been distributed according to the respective areas of interest and competence of the respective teachers. A reflection made by involved teachers is that the available time would be better utilized by allowing the students to perform an exercise task involving visualization of text collections. This would give the students an introduction to the software used in the practical assignment, but also better prepare them for the lecture dealing with the processing of text.

Another reflection made by the teachers is that the software used for the practical assignment appears to work properly but could be simplified because these applications require a relatively extensive instructional material. It would also be desirable to allocate teaching space to provide practical instructions for these applications along with the externally available visualization tools used on the course. An extension to the functionality of the analytical tools to include, for example, stemming is also something that should be considered.

### *Summary and additional comments*

Based on the limited number of answers, and the fact that no free-text comments have been supplied, makes it difficult to draw any solid conclusions from the course evaluation. The results on the examination tasks indicate, however, that the course has a design that works well to aid the student in reaching the learning outcomes. Further input is necessary in order to come to terms with the indications in the course evaluation that the currently used modes of teaching are insufficient. However, a certain focus ought to be put on introducing information retrieval more clearly as a research area, so that the students will be better equipped to understand current issues, as well as to know the main methods and approaches for, IR research. Furthermore, some restructuring of the residential period should be made so that time is reserved for practical exercises with evaluation, text analysis and/or visualization.

### *Any proposed changes*

No major changes to the course are deemed necessary for the time being. As mentioned above in the course report, the analytical software for the practical examination task should be reviewed, simplified, and possibly expanded with additional functionality such as stemming. Furthermore, the joint teaching session during the residential period should be used to a greater extent for practical exercises. The course book is planned to be retained but needs to be supplemented with material (such as research articles or conference papers) that highlight the research process in information retrieval.

### **Course Coordinator:**

Johan Eklund