UNIVERSITY OF BORÅS

Basics of Bibliometrics
Bibliometrins grunder
7.5 credits
7.5 credits

Ladok Code: C3FBG1
Version: 1.0
Established by: Utskottet för utbildningar inom bibliotek, information och IT 2016-05-31
Valid from: Autumn 2016

Education Cycle: First cycle
Main Field of Study (Progressive Specialisation): Library and Information Science (G1N)
Disciplinary Domain: other
Prerequisites: General entry requirements only.
Subject Area: Library and Information Science
Grading Scale: Seven-degree grading scale (A-F)

Content

The introductory sections of the course give an overview of the basic aspects of working with bibliometric data that a librarian needs to have knowledge and skills about when working in an academic/business library or a government agency. Instruction includes alternating lectures and practical workshops where students learn to understand and describe basic bibliometric concepts, theorems and methods, the practical implementation of basic information retrieval in bibliometric data sources and to perform analysis and reporting of bibliometric data, descriptive statistics, graphs and visualizations. Examples of tasks are the analysis of publishing patterns of research groups in relation to library holdings, to contribute to a publishing strategy, or the measurement of research impact through alternative "metrics".

The closing section of the course gives training at an overall level to evaluate and ethically assess the co-production of bibliometrics and research. Issues raised are the role and applications of bibliometrics in a research policy context, as well as their repercussions on the research community. This is examined by an assignment where the practical and theoretical reflective approach to bibliometrics is trained in the light of the professional role of librarians.

Learning Outcomes

After completing the course the student is expected to be able to, concerning,

Knowledge and understanding
1.1 Describe basic bibliometric concepts, theorems and methods,

Competence and skills
2.1 Perform bibliometric studies wherein planning, execution and analysis are included.
2.2 Analyze and describe bibliometric data through descriptive statistics, graphs and visualisations

Judgement and approach
3.1 Contrast between different applications of bibliometric methods with regards to library and information science,
3.2 Reflect on how different applications of bibliometrics relates to intra-scientific and research policy conditions.

Forms of Teaching

Tuition is conducted through:
- lectures
- workshops
- seminars

The language of instruction is English.

Forms of Examination

Examination of the course occurs through:

Workshop 1: Introduction till publication data (with written assignment)
Learning outcomes: 1.1
ECTS: 1,0
Grading scale: U-G

Workshop 2: Information retrieval (with written assignment)
Learning outcomes: 2.1
ECTS: 1,0
Grading scale: U-G

Workshop 3: Processing and analysis of bibliometric data (with written assignment)
Learning outcomes: 2.1 and 2.2
ECTS: 1,0
Grading scale: U-G

Workshop 4: Alternative metrics (with written assignment)
Learning outcomes: 2.2 and 3.1
ECTS: 1,0
Grading scale: U-G

Workshop 5: Evaluation and resource allocation (with written assignment)
Learning outcomes: 2.2 and 3.1
ECTS: 1,0
Grading scale: U-G

Project work with seminar: In depth study
Learning outcomes 2.1 and 3.2
ECTS: 2,5
Grading scale: A-F

For grade E for the whole course, at least the grade G or E holds for every examination part. The grade E or higher for the whole course is based on the grading of the Examination Project work with seminar.

Workshops and Seminar can be replaced by a written assignment if a student has failed to fulfil the wolrkshop och seminar requirements or has been absent.

In the event of changes in course plans students who wish to complete courses can be examined on the basis of the most recent version of the course plan. For courses that are no longer running, students who wish to complete such courses can read all or part of an equivalent course.

Student rights and obligations at examination are in accordance with guidelines and rules for the University of Borås.

Literature and Other Teaching Methods

The literature is in English.

Bensman, S.J. (2012). The impact factor: its place in Garfields thought, in science evaluation, and in library collection management. Scientometrics. 92:263-275. (=13 p.)

Edge, David. (1979). Quantitative Measures of Communication in Science: A Critical Review. History of Science 17:102-134. (28 p.)

Garfield, E. (1998). From citation indexes to informetrics: Is the tail now wagging the dog? Libri. 48:67-80. (=14 p.)

Glänzel, V. (2003). Bibliometrics as a Research Field. A course on theory and application of bibliometric indicators. (=115 p.)

Hammarfelt, B., Nelhans, G., Eklund, P., & Åström, F. (2016). The heterogeneous landscape of bibliometric indicators: Evaluating models for allocating resources at Swedish universities. Research Evaluation. doi: 10.1093/reseval/rvv040 (=14 p.)

Hellqvist, B. (2010) Referencing in the humanities and its implications for citation analysis. Journal of the American Society

for Information Science and technology. 6:310-318. (=9 p.)

Kronman, U. Gunnarsson, M. & Karlsson, S (2010). The bibliometric database at the Swedish Research Council - contents, methods and indicators. Swedish Research Council (=28 p.)

Kronman, U. (2011). Guide to Scientific Publication Management for Researchers at the KTH Royal Institute of Technology. KTH Royal Institute of Technology. Stockholm. (=21 p.)

Lundberg, J. (2006). Bibliometrics as a research assessment tool - impact beyond the impact factor. (Diss.), Karolinska Institutet, Stockholm. (=14 p., selection)

Sandström, U., & Sandström, E. (2009). The field factor: towards a metric for academic institutions. Research Evaluation, 18(3), 243-250. (=8 p.)

Wilson, C., S. and Tenopir, C. (2008). Local citation analysis, publishing and reading patterns: Using multiple methods to evaluate faculty use of an academic library's research collection. Journal of the American Society for Information Science and Technology, 59:1393-1408. (=16 p.)

In total 380 p.
In addition 100 pages of student fetched literature and distributed material

Student Influence and Evaluation

The course is evaluated in accordance with the current guidelines for course evaluations at the University of Borås, where students' views should be sought. The course evaluation report will be published and disseminated to participating and prospective students in accordance with the current guidelines, and forms the basis for future development of courses and training programs. The course coordinator is responsible for that the evaluation is performed according to current guidelines.

Miscellaneous

The course is a freestanding course.