Linnæus University

Jnr: UGA 2013/2539-3.1.2

Course syllabus

Faculty of Arts and Humanities
Department of Cultural Sciences

2BO325 Biblioteks- och informationsvetenskap: vetenskaplig kommunikation och bibliometri, 7,5 högskolepoäng

Library and Information Science: Scientific Communication and Bibliometrics, 7.5 credits

Main field of study
Library and Information Science

Subject Group
Library and Information Science

Level of classification
First Level

Progression
G2F

Date of Ratification
Approved 2012-08-15
Revised 2013-11-04 by Faculty of Arts and Humanities.
The course syllabus is valid from spring semester 2014

Prerequisites
In order to be admitted to the course the student must have received the grade of Pass on at least 22.5 credits in total in the courses 1BO305 Library, user and society III, 1BO315 Knowledge organization III, Pedagogics and Learning II, Methodology II, or their equivalents.

Objectives

After completing the course, the student should be able to:

- account for bibliometrics as a sub-field in library and information science, in terms of basic concepts, methodology and theoretical approaches,
- relate bibliometrics to issues and discussions concerning scientific communication and sociology,
- apply basic techniques in bibliometrics in a bibliometric programme for analysis and visualisation,
- analyse bibliometric data in a given subject area.

Content

This course includes an introduction to bibliometrics as a scientific sub-field and practice. The course includes a theoretical introduction, including the study of methodology and basic models, and a more practical part in which the student conducts a basic bibliometric analysis of a scientific sub-field of their choice. The course focuses on scientific, sociological perspectives, using bibliometrics as an active tool in the evaluation of research of societal relevance. An important part of the course concerns discussions of current developments in scientific communication, for example Open Access and digital archives, and differences between different scientific fields and how these influence the applicability of bibliometrics. The seminars, as well as all practical parts, are compulsory.

Type of Instruction

Teaching is delivered in the form of lectures, seminars and practical laboratory sessions. For the distance version of the course, different forms of distribution of the lectures and seminars might be used.

Examination

The course is assessed with the grades Fail (U), Pass (G) or Pass with Distinction (VG).
The course is examined through compulsory seminars and a written assignment. In order to receive the grade of Pass, the student must achieve the intended learning outcomes.

Course Evaluation

At the end of the course, a course evaluation is conducted and compiled into a report, which is made available to students and filed according to departmental regulations.

Required Reading and Additional Study Material

Required Reading

Bar-Ilan, Judit. (the latest edition) "Informetrics at the beginning of the 21st century: a review". *Journal of Informetrics*, Vol. 2(1): 1–52

De Bellis, Nicola. (the latest edition) *Bibliometrics and citation analysis: From the Science Citation Index to cybermetrics*. Lanham, MD: Scarecrow Press. 300 p.

Bjorneborn, Lennart., & Ingwersen, Peter. (the latest edition) "Perspectives of webometrics". *Scientometrics*, Vol. 50(1): 65–82.

Case, Donald. O., & Higgins, Georgeann. M. (the latest edition) "How can we investigate citation behaviour? A study of reasons for citing literature in communication". *Journal of the American Society for Information Science*, Vol. 51 (7): 635–645.

Cole, Jonathan. R., & Cole, Stephen. (the latest edition) "The Ortega hypothesis". *Science*, Vol. 178(4059), 368–375.

Hammarfelt, Björn. (the latest edition) "Harvesting footnotes in a rural field: citation patterns in Swedish literary studies". *Journal of Documentation*, Vol. 68 (4).

Leydesdorff, Loet., & Besselaar, Peter. Van. der. (the latest edition) "Scientometrics and communication theory: Towards theoretically informed indicators". *Scientometrics*, Vol. 38(1): 155–174.

Luukkonen, Terttu. (the latest edition) "Why has Latour's theory of citations been ignored by the bibliometric community?. Discussion of sociological interpretations of citation analysis." *Scientometrics* Vol. 38 (1): 27–37.

Merton, Robert K. (the latest edition) "The Matthew Effect in Science: The Reward and Communication Systems of Science are Considered", *Science*, Vol. 199 (3810): 55–63.

Rip, Arie. (the latest edition) "Qualitative conditions of scientometrics: The new challenges". *Scientometrics*, 38(1): 7–26.

Thelwall, Mike. (the latest edition) "Bibliometrics to webometrics". *Journal of Information Science*, Vol. 34(4): 605–621.

Wouters, Paul. (the latest edition) "Citations cycles and peer review cycles". *Scientometrics*, Vol. 38(1): 39–55

Åström, Fredrik. (the latest edition) "Changes in the LIS research front: timesliced cocitation analyses of LIS journal articles 1990–2004". *Journal of the American Society for Information Science and Technology*, Vol. 58 (7): 947–957.