RESEARCH IN INFORMATION SYSTEMS AND INFORMATICS  
(7.5 ECTS credits)  

Course leader: Prof. Pär Ågerfalk  
Teachers: Assistant Prof. Osama Mansour  
           Prof. Christina Keller  
           Dr. Jonas Sjöström  

Register to: golondrian.janke@fek.uu.se  
Time:  
13-14 February (Uppsala) Theme I  
12-13 March (Lund) Theme II  
1-2 April (Visby) Theme III  
19-20 May (Lund) Conclusion and term paper presentations  

Place:Ekonomikum, Uppsala universitet, Uppsala  
       Kyrkogårdsgatan 10, Rum A122 (13/2), H429 /14/2  
       Informatik, Ekonomihögskolan, Lunds Universitet,  
       Lund, Rum EC2:207 Bilbao  
       Informatik och media, Uppsala universitet – Campus Gotland, Visby  
       Cramérsgatan 3, DIG-rummet, A-huset vån 3  

Admission Requirements  
Enrolled as Ph.D. student. It is assumed that participants have an understanding of different  
research approaches, methodologies, and methods in the social sciences.  

Objectives  
The course focuses on how different approaches, methodologies, and methods can be used in  
information systems (IS) research and introduces the students to the scholarly literature in IS.  
The course has three main objectives:  

- Provide the students with an overview of key areas in information systems research.  
- Support the students in their development of a scholarly understanding of the fundamental  
  issues and problems in theory building, theory testing, and theory use in IS research.  
- Provide the students with an overview of how different approaches, methodologies, and  
  methods are used in IS research.  

These objectives will support the students in the development of their ability to identify  
underlying scientific positions and their strengths and limitations and the students’ ability to  
apply the knowledge to scholarly IS work. The course will prepare the students for contributing  
valuable works in their field.  

Format  
The course involves heavy reading, intense discussion in seminars, and regular research writing.  
Participants will write three short papers and one publishable paper. The seminars require high  
involvement of its participants. A prerequisite for high involvement is preparation (i.e. reading  
and reflecting on the assigned articles). Each seminar, or part of a seminar, will be led by two  
students—based on the seminar title and the associated reading.
list, they have to lead the seminar. The seminar leaders are required to generate and put forward a number of issues to debate. The rest of the group will discuss the issues, raise issues, and pose questions.

**Examination**
- Active participation in class. All four two-day sessions are compulsory. If a student has valid reasons not to attend a session (one at the most), an additional assignment will be required in order to pass the course.
- Three position papers (single-authored, three pages). The position papers should address the course’s three themes.
- One publishable review-paper (single-authored or co-authored, six pages) showing a good understanding of the issues addressed in the course and how they apply to the student’s research area(s) and question(s). This paper should identify a relevant theory and trace its use in the IS research. A good source for inspiration is [https://is.theorizeit.org/wiki/Main_Page](https://is.theorizeit.org/wiki/Main_Page)

The grades given are pass or fail.

**Structure and Readings**
The course has three themes, each addressed in a seminar:
- Towards an understanding of IS research.
- Use of theories, theory building, and theory testing in IS research.
- IS research approaches.

**Literature**
See the separate literature list (below). The list is tentative (minor changes may be made).
Theme I: Towards an Understanding of Information Systems (IS) Research.

Issues addressed include: 1) what is IS research and what is specific about IS research, 2) how has the IS field evolved and where is it going, and 3) the international academic field of IS.

Towards an understanding of IS research.
We will discuss different issues related to the academic field IS/Informatics. Bring your own (your department’s) view(s). Readings for the first section:


**Review articles and papers**

In doing rigorous and relevant (IS) research a good understanding of the field or sub-field is mandatory. A good way to get a head start is to read and use review articles/papers. Many of these are very good read. They give condensed overviews, show a sub-field’s roots, show how a sub-field has evolved, identify key researchers in the sub-field, identify ways to improve research within the sub-field, etc. These articles provide useful advice on how to write review articles:


In the list above (for the first section), you can also find examples of actual reviews (Orlikowski & Iacono; Burton-Jones et al.).

**Reading instructions**

Before the first meeting, you **should (a must)** have read: Avison & Elliot, Alter, Hirschheim & Klein, Benbasat & Zmud, Keen, Orlikowski & Barley, and Orlikowski & Iacono. You should also familiarize yourself with the rest of the articles.

Additionally, you are expected to select one of the 17 articles (for the first section) that you find intriguing and be prepared to present it to the class and lead a discussion about it (if you can’t find one, you have to fake it). You may want to talk explicitly about how it relates to your own research.

**Examination**

You should hand in a position paper (single-authored, three pages) that reflect on your own research area in the light of the literature and discussions of Theme I.
Theme II: Use of Theories, Theory Building and Theory Testing in IS Research

Theme II includes the following three sub themes:

- Theories frequently used in information systems research
- Theory testing and theory building in information systems research
- Rigor and relevance

Theme II will be examined by active participation in the seminars and one individual position paper based on the articles about theory testing and theory building as well as rigour and relevance.

Theories frequently used in information systems research

In the part of the course that addresses theories frequently used in information systems research four major and common theoretical approaches in information systems research will be presented by the students. This will be done in groups of 3-4 students each. Each student group chooses one of the four theoretical approaches; actor-network theory, socio-materiality, structuration theory or technology acceptance. The presentations should be based on the articles listed below, which aims to provide an introduction to the origins of the theories as well as how they are used in empirical research. In addition to this, you are also free to search for and present other references and use this wiki from Association of Information Systems: https://is.theorizeit.org/wiki/Main_Page

The presentation will be held on the first day of Theme II. The presentation material should be published in the Pingpong event of the course one day prior to the first day of Theme II.

Actor network theory


**Socio-materiality**


**Structuration theory**


**Technology acceptance**


**Theory testing and theory building in information systems research**

On the second day of Theme II, a short lecture will be held discussing these two sub-themes. The lecture will be followed by a group discussion based on the articles listed. As preparation for this discussion, you must send in your position paper (3 pages) in the Pingpong event of the course one day prior to the first day of Theme II.

This paper should present an elaborate account on; which theory would you like to use in your dissertation work, how does this theory relate to the four approaches presented on the first day of Theme II, how do you plan to contribute to either testing or building theory, how do you plan to solve issues related to rigour and/or relevance?

**Articles:**


**Rigour and relevance**


Theme III: IS Research Approaches and Pluralism and Diversity in IS research

The third theme of the course includes the following issues: 1) qualitative approaches, methodologies, and methods 2) selecting and combining different approaches, methodologies, and methods, and 3) social science and engaged scholarship.

Qualitative approaches, methodologies, and methods
The first part of theme III focuses on methodological considerations when conducting qualitative research, including issues related to theorizing and generalisation. Note that the part on social science and engaged scholarship further below extends this part, elaborating further on qualitative research methods.


Selecting and combining different approaches, methodologies, and methods
In the second section, we reason about the selection of appropriate methods to use given the research goals. Typically, multiple methods may be used in concert, which is the topic of several articles below.


Social science and engaged scholarship
The third part of theme III addresses issues related to doing intervention–style research, i.e., articulating knowledge that emerges from work in collaboration with practitioners. In doing this, we cover topics such as engaged scholarship, action research, and design science research approaches.

** Davison, Martinsons & Ou (2012): The Roles of Theory in Canonical Action Research. MIS Quarterly, 36(3), 763–786


** Reading instructions**
As you can see in the literature list for theme III, there is a great diversity in approaches to IS research. Also note that this is a selection of approaches with a focus on qualitative research. The articles marked with the prefix “**” are the most important ones to read to prepare for the theme III sessions. Note that some of the papers in this theme were also included earlier in the course – we still find it important to include them and reflect on them further in the context of research approaches.

** Examination**
Hand in a position paper (single-authored, three pages) that reflect on your own research area in the light of the literature and discussions of Theme III.
Final Seminar: Conclusion and Term Paper Presentations

In this seminar, you will present your publishable review-paper (single-authored or co-authored) showing a good understanding of the issues addressed in the course and how they apply to the student’s research area(s) and question(s). This paper should identify a relevant theory, approach or domain and analyse its treatment in the IS literature. This paper must be submitted one week prior to the first day of the final seminar. A template will be provided in due time.

The structure will have a traditional conference structure where you will present your paper in a 30 minutes presentation with the following discussion. Two fellow students will act as opponents, helping the author to improve the paper. The final deadline for this paper is one week after the final seminar.