

# COURSE SYLLABUS Research Methods in Informatics, 7.5 credits

Research Methods in Informatics, 7,5 högskolepoäng

Course Code:	INTR23	Education Cycle:	Second-cycle level
Confirmed by:	Council for Undergraduate and Masters Education	Disciplinary domain:	Technology
	Jun 1, 2010	Subject group:	IF1
Revised by:	Council for Undergraduate and Masters Education Oct 22, 2014	Specialised in:	A1N
Valid From:	Jan 19, 2015	Main field of study:	Informatics
Version:	2		
Reg number:	IHH2014/04054-122		

## Intended Learning Outcomes (ILO)

On completion of the course the student will be able to:

Knowledge and understanding

1. demonstrate an understanding of basic and specific methodological concepts within informatics and information systems research.

2. demonstrate an understanding of national and international informatics and information systems research.

3. demonstrate an understanding of descriptive and referential statistics.

4. demonstrate an understanding of qualitative data analysis.

Skills and abilities

5. demonstrate the ability to formulate research purposes and research questions.

6. demonstrate the ability to present research data and results in a coherent and adequate manner.

7. demonstrate the ability to present conclusions in speech and writing to different audiences in both

national and international contexts.

Judgement and approach

8. independently choose literature, theoretical frameworks, research approaches, and methods/techniques for data collection.

9. independently judge ethical issues in connection to research studies.

10. critically evaluate and defend research performed by themselves and others.

## Contents

How to perform literature reviews and meta-analyses

- Academic writing, opposition and defence
- Concepts of research credibility
- Descriptive statistics, correlations and regression
- The survey research approach and methodology
- The case study research approach and methodology

- Techniques for data collection; interviews, observations, document analysis and survey questionnaires
- Qualitative data analysis
- Foundations and trends of national and international informatics and information systems research

## **Type of instruction**

Lectures, seminars, supervision and workshops.

The teaching is conducted in English.

#### **Prerequisites**

Bachelor's degree in Informatics (or the equivalent).

#### **Examination and grades**

The course is graded A, B, C, D, E, FX or F.

ILOs 1, 2, 3, 4, and 5 will be assessed through the individual written exam.

ILOs 5, 6, 7, 8, 9, and 10 will be assessed through the group assignment and seminar/workshop group work.

Registration of examination:

Name of the Test	Value	Grading
Individual written exam	4 credits	A/B/C/D/E/FX/F
Group assignment	2.5 credits	A/B/C/D/E/FX/F
Seminar/workshop group work	1 credit	U/G

## **Course evaluation**

It is the responsibility of the examiner to ensure that each course is evaluated. At the outset of the course, evaluators must be identified (elected) among the students. The course evaluation is carried out continuously as well as at the end of the course. On the completion of the course the course evaluators and course examiner discuss the course evaluation and possible improvements. A summary report is created and archived. The reports are followed up by program directors and discussed in program groups and with relevant others (depending on issue e.g. Associate Dean of Education, Associate Dean of faculty, Director of PhD Candidates, Dean and Director of Studies). The next time the course runs, students should be informed of any measures taken to improve the course based on the previous course evaluation.

#### **Other information**

Academic integrity

JIBS students are expected to maintain a strong academic integrity. This implies to behave within the boundaries of academic rules and expectations relating to all types of teaching and examination.

Copying someone else's work is a particularly serious offence and can lead to disciplinary action. When

you copy someone else's work, you are plagiarizing. You must not copy sections of work (such as paragraphs, diagrams, tables and words) from any other person, including another student or any other author. Cutting and pasting is a clear example of plagiarism. There is a workshop and online resources to assist you in not plagiarizing called the Interactive Anti-Plagiarism Guide.

Other forms of breaking academic integrity include (but are not limited to) adding your name to a project you did not work on (or allowing someone to add their name), cheating on an examination, helping other students to cheat and submitting other students work as your own, and using non-allowed electronic equipment during an examination. All of these make you liable to disciplinary action.

#### **Course literature**

Literature

Yin, R. K. (2003). Case Study Research: Design and Methodologies. Sage Publications.
Patton, M. Q. (2005). Qualitative Research. Wiley.
Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E. & Tatham, R. L. (2010). Multivariate Data Analysis. Pearson Education.
Articles and excerpts from book chapters will be provided during the course.