

#### COURSE INFORMATION

Research Methods, Advanced,

# Practice Oriented Research, 5 hec

Forskningsmetodik, fördjupning, 5 hp

#### Introduction

This is an advanced course, meaning that a deeper knowledge is aimed at, within a specific research method. The course follows the general syllabus for the mandatory course Research methods, advanced, in the subject area production system at School of Engineering, Jönköping University. The course is of course also open for doctoral students from other subject areas.

The course includes specialization in one or more research methods that are essential for the doctoral student's own thesis or current research project. This specific course focus on practice oriented research, e.g. collaborative, interactive, action and co-production research. The course contains the following elements:

- Background and development of practice oriented research
- Application of practice oriented research
- Evaluation of results that can be achieved with practice oriented research

# Learning outcome

On completion of the course the student must (according to general syllabus, vd-beslut 2014/077):

#### Knowledge and understanding

- be familiar with the background and development of the research methods in question
- display deeper knowledge of the research methods in question
- demonstrate comprehension of the application of the research methods in question within relevant research area

#### Skills and abilities

 demonstrate skills of planning a limited research task where the research methods in question is used

#### Judgement and approach

- demonstrate ability to motivate and judge when the research methods in question are appropriate to use
- demonstrate understanding of limitations with the research methods in question
- demonstrate ability to evaluate the results that can be achieved with the research methods in question

# Type of instruction

Lecture and seminars. Teaching is conducted in English or Swedish dependent on the requirements among participating doctoral students.

#### **Prerequisites**

Admitted to third-cycle programmes or equivalent. Basic knowledge on research methods in general is strongly recommended.

# Examination and grades

The course is graded Fail or Pass. The examination consist of three assignments, of which the first one is individual and the latter two in group, and a group examination of the course book. All



tasks are examined both in writing and orally. All assignments will be described in more detail when the course starts.

Name of the test	Value	Grading
Assignments	5 hec	U/G

#### Assignment I (individual): Create a research plan

Each student shall write a research plan, describing in detail how a research project should be carried out. Start with a relevant research question and elaborate on appropriate research method, techniques for data collection, how to interact with participants, how to work with data analysis, how to secure scientific quality and practical relevance, etc. Each student should also give qualified oral feedback on research plans written by two other doctoral students.

# Assignment 2 (group): Analysis of a method chapter using practice oriented research in a published thesis

In group, a thesis using a practice oriented research method is selected. In this assignment focus is on the method-section of the thesis, which should be analysed and discussed in relation to problem, result, etc. With support from literature: create a foundation for the analysis (a "checklist" on how to evaluate research using practice oriented research). The result is presented at a seminar.

#### Assignment 3 (group): Seminar on selected branch of practice oriented research

In group, the students should select a specific branch of practice oriented research (e.g. collaborative, interactive, action etc.) and plan and carry out a seminar on that. The seminar should at least include background, techniques for data collection, how to work with data analysis, how to secure scientific quality and practical relevance, etc.

#### Examination of the course book

The course starts with a group examination (tentamen) of the course-book.

## **Ping Pong**

PingPong is used to store material and also provide a complementary online resource (Research Methods Online).

Name of activity in PingPong: Practice Oriented Research (Research methods, advanced) - S18 Password: pors18

#### **Teachers**

**Course responsible**: Assistant Professor Jenny Bäckstrand, School of Engineering, Jönköping University (JB), 036-10 1629. jenny.backstrand@ju.se.

**Examiner**: Professor Kristina Säfsten, School of Engineering, Jönköping University. (KS)

#### Guests:

Professor Lennart Svensson, Department of Behavioural Sciences and Learning, Linköping University. (LS)

Assistant Professor Duncan Levinsohn (DL), Jönköping University.

Assistant Professor Annika Engström (AE), Jönköping University.

Professor Joann Keeton, North Caroline State University

Professor Árni Halldórsson, Chalmers

Professor Hilary Bradbury, Oregon Health & Science University/Chalmers



Preliminary schedule spring 2018

When	Topic	Description	Teachers
ToDo before meeting 1		Read the article collection	
Meeting 1 8/3 2018 9-16	Introduction	Introduction of the course, presentations.	JB
	Lecture	Lecturing on the course content – widening the concepts, relating to other sources, related concepts	ЈВ
	Lecture	Quality and validity with qualitative research/action research/interactive research + introduction to concept mapping	Árni Halldórsson
	Forming groups	Form groups for assignment 2 and 3	JB
ToDo before meeting 2		Read material on Action research	
Meeting 2 21/3 2018 All day	Road trip and seminar	Attend lecture by Hilary Bradbury at Chalmers + networking with PhD students at TME, Chalmers.	ЈВ
ToDo before meeting 3		Read material from Lennart Svensson	
Meeting 3 4/4 2018 9-16	Lecture and seminars	Focus on interactive research: background, history, development, criticism, how to use it, what results can be achieved, to publish	Lennart Svensson
	"Examination"	Examination of the article collection. Discussions.	JB, KS
ToDo before meeting 4		Assignment 2	
Meeting 4 24/4 2018 9-16	Seminar	Assignment 2 is presented	JB, KS
	Lecture/Lab	Data analysis with NVivio	Duncan Levinsohn
ToDo before meeting 5		Assignment 3 + material from Annika	
Meeting 5 3/5 2018 9-16	Seminar	Assignment 3 is presented	JB, KS
	Lecture	Data collection methods	Annika Engström
ToDo before meeting 6		Assignment 1 +Read material from Joanne	
Meeting 6 22/5 2018 9-16	Lecture and Seminar	TBD	Joann Keeton
	Final seminar	Assignment I is presented and discussed.	JB, KS
		Wrap up and evaluation of the course	

# Register for the course

Register for the course to Jenny Bäckstrand, <u>jenny.backstrand@ju.se</u>, 036-101629 Last day for signing up is February 1st, 2018.



#### Course literature

#### Mandatory

Collection of articles TBD

#### Research Methods Online

As an additional source of information, the online course Research Method Online is available for all participants via Ping Pong. Here you can find additional readings, recorded lectures, and much more.

#### Other readings that might be relevant (to be updated)

Aagaard Nielsen, K, Svensson, L. (2006) *Action and interactive research: beyond practice and theory.* Maastricht: Shaker Publishing BV.

Adler, N., Shani, A. B. R., and Styhre, A. (Eds.). (2004) *Collaborative research in organizations:* Foundations for learning, change, and theoretical development, SAGE Publications, Inc., London, UK.

Antonacopoulou, E., Jarvis, P., Andersen, V., Elkjaer, B., Høyrup, S. (2005) *Learning, Working and Living. Mapping the terrain of Working Life Learning*, Palgrave Macmillan, Hampshire.

Bryman, A, Bell, E. (2007) Business Research Methods, Oxford University Press.

Börjesson, S. (2012) Collaborative research for sustainable learning: the case of developing innovation capability at Volvo Cars, *Action Learning: Research and Practice*, Vol. 8, No. 3, pp. 187-209.

Flick, U. (2006) An Introduction to Qualitative Research, Sage Publications, Thousand Oaks.

Gummesson, E. (2000) *Qualitative Methods in Management Research*, 2<sup>nd</sup> ed., Sage Publication, Inc., Thousand Oaks, California.

Gunnarsson, E. Hansen, H.P., Steen Nielsen, B. and Sriskandarajah, N. (eds) (2015) *Action Research for Democracy - New Ideas and Perspectives from Scandinavia*, Routledge (Routledge advances in research methods; No. 17), New York.

Johannisson, B.; Gunnarsson, E. and Stjernberg, T. (red.) (2008) *Gemensamt kunskapande – den interaktiva forskningens praktik*, Acta Wexionensia Nr 149/2008, Växjö University Press, Växjö.

Karlsson, C. (ed) (2009) Researching Operations Management, Routledge, Taylor & Francis, Inc.

Kvale, S. (1997) *Den kvalitativa forskningsintervjun*, Studentlitteratur, Lund.

Maxwell, J. A. (2013) *Qualitative research design: an interactive approach*, SAGE Pulications Inc.

Miles, M. B. and Huberman, A. M. (1994) *Qualitative data analysis: an expanded sourcebook*, Sage Publications, Inc., Thousand Oaks, California.

Pasmore, W., Stymne, B., Shani, A.B., Albers Mohrman, S., Adler, N. (2008) *Handbook of Collaborative Management Research*, SAGE Publications, Inc.

Phillips, L., Gunnarsson, E., Horst, M., Kristiansen, M., Vehvilainen, M. (2015) *Knowledge and power in collaborative research: A reflexive approach*, Routledge, New York.

Shani, A.B, Coghlan, D., Cirella, S. (2012) Action Research and Collaborative Management Research:More than Meets the Eye?, *International Journal of Action Research*, Vol. 8, No. 1, pp. 45-67.

Svensson, L., Ellström, P-E., Brulin, G. (2007) Introduction – in interactive research, *International Journal of Action Research*, Vol. 3, No. 3, pp. 233-249.