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.

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<thead>
<tr>
<th>Name of the test</th>
<th>Value</th>
<th>Grading</th>
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<tbody>
<tr>
<td>Assignments</td>
<td>5 hec</td>
<td>U/G</td>
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</table>

**Assignment 1 (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 Carolina State University
Professor Árni Halldórsson, Chalmers
Professor Hilary Bradbury, Oregon Health & Science University/Chalmers
# Preliminary schedule spring 2018

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

Register for the course to Jenny Bäckstrand, jenny.backstrand@ju.se, 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)**


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


