Introduction to Business & Information Systems Research

Course Profile

<table>
<thead>
<tr>
<th>Type</th>
<th>Lecture + Tutorial</th>
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<tbody>
<tr>
<td>Lecturer</td>
<td>Prof. Dr. Nils Urbach</td>
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<tr>
<td>Hours per Week</td>
<td>2 + 1 SWS</td>
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<td>ECTS</td>
<td>6</td>
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<tr>
<td>Language</td>
<td>English</td>
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<td>Start date</td>
<td>October 22nd, 2013</td>
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Course Description

The lecture “Introduction to Business & Information Systems Research” is designed to provide students with an opportunity to build up basic theoretical and methodological skills needed to conceptualize, conduct, and communicate their own research. To do so, the lecture will familiarize students with the essential triad consisting of topic, methods, and theories. While selecting an exciting topic is a fundamental anchor for research’s relevance, a research’s ability to provide rigorous results depends on a sound command of theories and methods.

In this context, theories provide the researcher a sound basis by summarizing current knowledge and allowing for a precise investigation and definition of their topic’s underlying phenomenon. They also provide the students with a theoretical lens to investigate their topics from the perspective they are most interested in. Complementary to this, methods afford the student with the ability to produce reliable results which allow her/him to derive both meaningful and trustworthy conclusion. This way they can make sure that their results are not only interesting, but also scientifically valid.

To support students in their preparation for their master theses, the course will introduce the most common methods used in business research by looking at examples from the Information Systems (IS) discipline. This includes how to carry out a literature review as well as qualitative (e.g., case study research) and quantitative (e.g., survey-based research) methods of empirical research. Furthermore, the design science paradigm will be discussed.

Learning Objectives

- Ability to understand the relevance of methods and theories in meaningful research
- Overview of most common methods and theories used in business and IS research
- Basic understanding of the core phenomena in IS
- Ability to prepare and execute own research project (e.g., master thesis)
- Knowledge of the basic quality criteria for scientific research
## Course Outline

<table>
<thead>
<tr>
<th>Section</th>
<th>Date / Time</th>
<th>Topics</th>
<th>Readings / Textbook</th>
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<tbody>
<tr>
<td>#01</td>
<td>Tuesday, 22.10.2013, 10:00 – 12:00</td>
<td>Introduction and Administration</td>
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| #02     | Tuesday, 29.10.2013, 10:00 – 12:00 | The What, How and Why  
- Scientific Thinking  
- Research Process  
- Philosophy of Science | Bhattacherjee (2012), ch. 1  
Bhattacherjee (2012), ch. 3  
Bhattacherjee (2012), ch. 16 |
| #03     | Tuesday, 05.11.2013, 10:00 – 12:00 | Scientific Writing and Publishing  
- Paper Structures  
- Publishing Process  
Lee (1995)  
Lepak (2009)  
Straub (2009) |
| #04     | Tuesday, 12.11.2013, 10:00 – 12:00 | Research Design I – Topics  
- Domains of IS  
- Fundamentals  
Orlikowski and Baroudi (1991)  
Bhattacherjee (2012), ch. 5  
Bhattacherjee (2012), ch. 6  
Bhattacherjee (2012), ch. 7  
Bhattacherjee (2012), ch. 8 |
| #05     | Wednesday, 20.11.2013, 08:00 – 10:00 | Research Design II – Theories  
- Definition and Concepts  
- Building on Theory  
- Contributing to Theory | Bacharach (1989)  
Gregor (2006)  
Sutton and Staw (1995)  
Truex et al. (2006)  
Bhattacherjee (2012), ch. 2  
Bhattacherjee (2012), ch. 4 |
| #06     | Tuesday, 26.11.2013, 10:00 – 12:00 | Research Design III – Methods  
- Research Design Revisited  
- Data Collection  
- Data Analysis | Palvia et al. (2004)  
Wild and Hess (2007)  
Mingers (2001)  
Bhattacherjee (2012), ch. 10  
Bhattacherjee (2012), ch. 12 |
| #07     | Tuesday, 03.12.2013, 10:00 – 12:00 | Literature Review  
- Introduction | Fettke (2006)  
Kitchenham (2004)  
Webster and Watson (2002) |
| #08     | Wednesday, 04.12.2013, 08:00 – 10:00 | Tutorial #3: Literature Review | |

*Tutorial #1: Research Foundations*

*Tutorial #2: Research Design*

*Tutorial #3: Literature Review*
### Case Study
- **Introduction**

- **Eisenhardt (1989)**
- **Gibbert et al. (2008)**
- **Dubé and Paré (2003)**
- **Klein and Myers (1999)**
- **Bhattacherjee (2012), ch. 11**
- **Bhattacherjee (2012), ch. 13**

### Reading-Based Discussion

- **Lapointe and Rivard (2007)**
- **Levina and Vaast (2008)**
- **Wagner et al. (2010)**

### Tutorial #4: Case Study Research

### Survey
- **Introduction**

- **Boudreau et al. (2001)**
- **Pinsonneault and Kraemer (1993)**
- **Straub et al. (2004)**
- **Bhattacherjee (2012), ch. 9**
- **Bhattacherjee (2012), ch. 14**
- **Bhattacherjee (2012), ch. 15**

### Tutorial #5: Survey-based Research

### Design Science Research
- **Introduction**

- **Gregor and Jones (2007)**
- **Hevner et al. (2004)**
- **Walls et al. (1993)**

### Tutorial #6: Design Science Research

### Summary and Conclusion
- **Q&A**
- **Exam Preparation**

### Rooms
- Tuesday, 10:00 – 12:00: S 130 (NW III)
- Wednesday, 08:00 – 10:00: S 103 (FAN)

### Reading Materials
The reading material to be used in this class provides students with both content and background for the topics introduced and discussed in the course. Students have to prepare for sessions by reading...
and summarizing the mandatory material in order to allow for an efficient classroom experience. Optional readings are introduced as part of the lecture and provide students with the opportunity to extend their understanding beyond the material discussed in class. These readings are also important references that can be used to justify methodological and theoretical choices in the students’ research projects (e.g., Master thesis). Further details for preparation will be provided to students in class.

Tutorials

The tutorials will be used to discuss review questions and clarify students’ questions on the course content as well as to discuss suggested readings in more depth or additional readings on the same topic.

Course Requirements

This course is offered to all Master students enrolled in the Business Administration (BWL) or Business Engineering (WIng) program of the University of Bayreuth as part of the module B1 (Research Methods), the supplementary module (“Ergänzungsmodul”), or the TOP specialization. There are no prerequisites for attending this course. Exchange students are welcome.

Maximum Number of Participants

The number of participants is limited to 30 in order to allow for an efficient classroom experience.

Course Grading

The course will be graded on the basis of a written exam (English or German, duration 60 minutes) covering the learning objectives of the lecture.

Course Materials

Students will be provided with all necessary materials at the beginning of each session. Readings are available through the university’s electronic library resources (Elektronische Zeitschriftenbibliothek): http://www.ub.uni-bayreuth.de/de/digitale_bibliothek/e-journals/index.html

Workload

180h total student’s workload, thereof:

- Active in-class participation 30h
- Active participation in tutorials 15h
- Preparation, revision and exam preparation 135h
Acknowledgements

Several ideas and contents of this lecture are borrowed from the lecture “Methods and Theories in Information Systems (ManTIS)” developed by Dr. Benjamin Müller from the University of Mannheim.

References


