

UNIVERSITÄT
MANNHEIM

Knowledge Management

Welcome

Dr. Johanna Völker

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FSS 2012

1 The Chair of Artificial Intelligence



Heiner Stuckenschmidt
Professor

Stefanie Keil
Office



Dr. Mathias Niepert
Post-Doctoral Researcher



Dr. Johanna Völker
Margarete-von-Wrangell
Habilitation Scholarship



Dr. Christian Meilicke
Postdoctoral Researcher



PhD Students

- Anne Schlicht
- Daniel Fleischhacker
- Johannes Knopp
- Rim Helaoui
- Cécilia Zirn
- Jan Nößner



Sebastian Kotthoff
System Administrator

Current Projects

Mapping Assistant (BMBF 2010)
Interactive Data Integration



ProMap (DFG 2009)
Probabilistic Mappings for the Semantic Web

Polytos (SAP 2009)
Smart Infrastructure for Smart Labels



SEALS (EU FP7 2009)
Semantic Evaluation at Large Scale

InFoLiS (DFG 2011)

Integrating Research Data and Literature in Social Science



Linking and Populating Digital Humanities (DFG 2011)
Robust and Scalable Reasoning for Information Extraction

Industry Cooperations



SAP Research, CEC Karlsruhe: Infrastructure for organic Smart Labels



Ontoprise GmbH, Karlsruhe: Intelligent User Support for Data Integration



Seeburger AG, Bretten: Intelligent User Support for Data Integration



SynnX Solutions GmbH – A Collexis Company, Köln: Document Management



SysTec-CAX, Ingolstadt/München: Access Control for Rule-based Systems



Encoway GmbH, Bremen: Management of Application Knowledge



Adtelligence GmbH, Mannheim: Social Network Analysis for online Marketing

Teaching

Bachelor Wirtschaftsinformatik

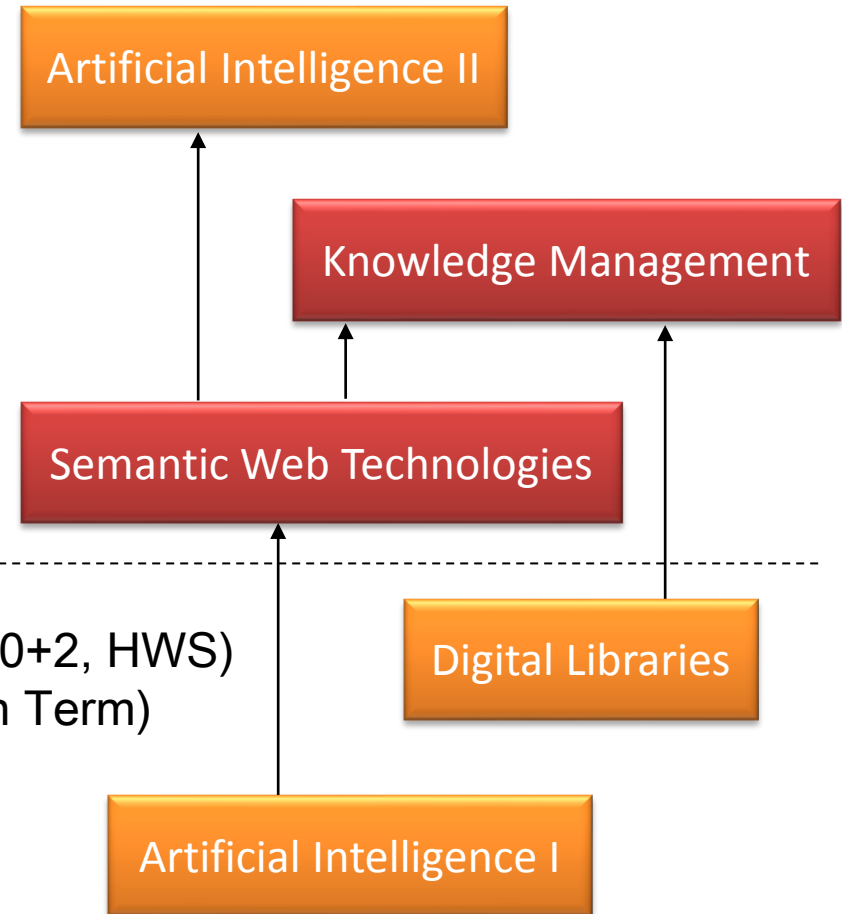
Computer Science II (4+2, FSS)
Artificial Intelligence I (2+2, HWS)
Digital Libraries (2+2, HWS)

Master Wirtschaftsinformatik

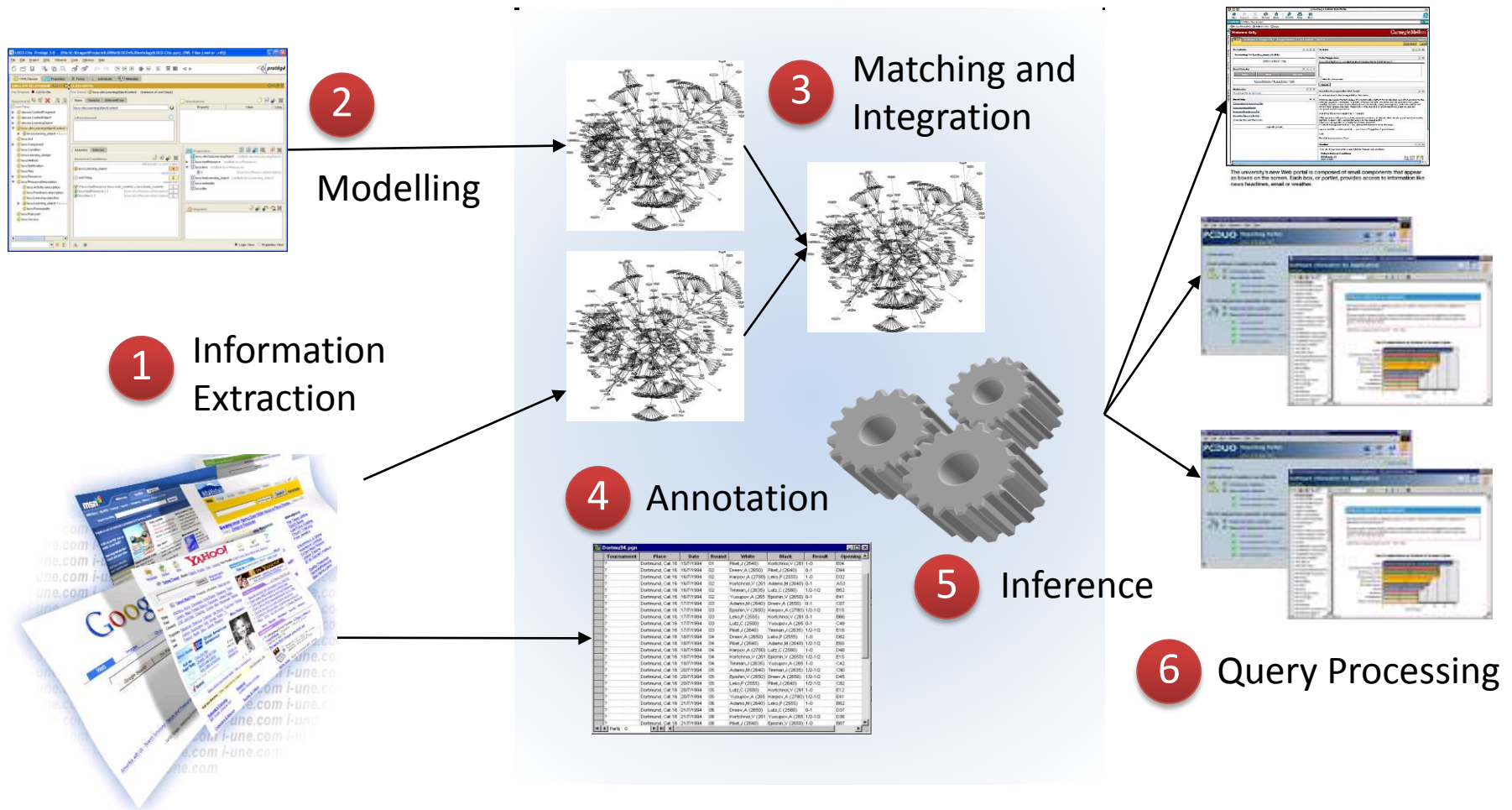
Knowledge Management (2+2, FSS)
Semantic Web Technologies (2+2, HWS)
Artificial Intelligence II (2+2, HWS)
Seminar Data und Knowledge Engineering (0+2, HWS)
Team Project Intelligent Systems (0+3, Each Term)

PhD Courses

AI Colloquium (0+2, Each Term)



Knowledge-based Applications



2 About the Course



Learning Goals

- Ability to assess the value **knowledge** has for organizations
- Overview of **knowledge management** strategies
- Acquaintance with **technical foundations** of knowledge management systems
 - Information Retrieval and Text Mining
 - Knowledge Representation: Repositories and Query Answering
 - Collective Intelligence: Web 2.0, Social Networks, Crowdsourcing
- Programming skills and IT competence: **practical usage** of technologies for knowledge acquisition and maintenance

The Lectures

Monday
12 am – 1:30 pm
B6, 23-25, Room A1.04

- **Date:** Monday, 12:00 am – 1:30 pm
- **Location:** B6, 23-25, Bauteil A – Room A1.04
- **Time and effort**
 - 2+2 hours (2h lecturing, 2h exercise)
 - 6 ECTS (= 180h of work)
- **Passing the course**
 - Participation in the exercises: achieve 50% of the total exercise points, present your solution at least once
 - Written exam with grade 4.0 or better
- **Final grade:** your result from the written exam

The Exercises

- **Dates:** Wednesday and Tuesday
- Exercises will start on Tuesday, **21st of February**
 - 1st assignment: Monday, **20th of February**
 - Paper submission of solution: Monday, **27th of March** (during lecture or put into Dekanat's mailbox in B6, 26, first floor)
- Assignments will be published on Mondays and have to be completed by Monday, one week later (**7 days**)
 - You may work in teams of at most two.
 - Basic programming skills required
 - **No plagiarism!**
- **Contact:** Jan and Johannes
km12@informatik.uni-mannheim.de

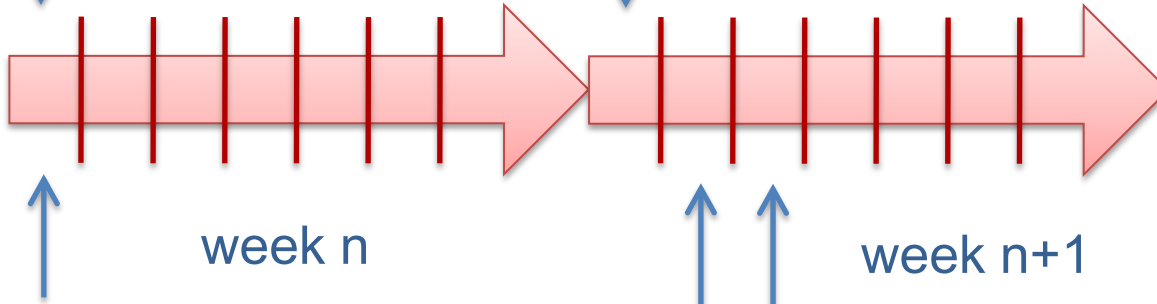
Wednesday
1:45 – 3:15 pm
B6, 23-25, Room A1.04

Tuesday
3:30 – 5:00 pm
B6, 23-25, Room A3.02

The Exercises

Monday

Lecture on Topic t



Get Assignment x on Topic t

Monday

Submit your Solutions to Assignment x



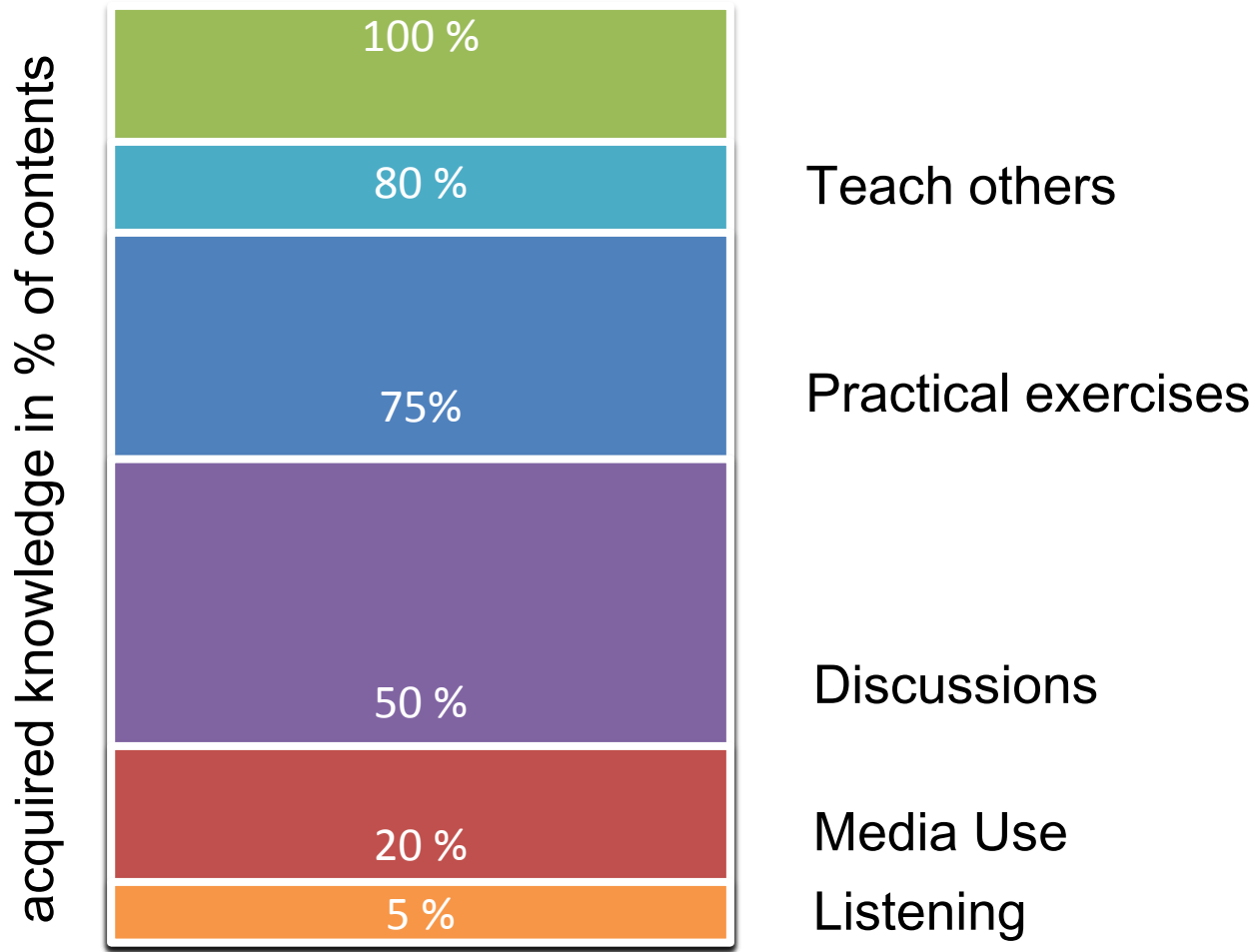
Present and Discuss Solutions to Assignment x

Tuesday and Wednesday

real paper!



Why Practical Exercise?



Questions?



Johanna Völker

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Johannes Knopp and Jan Noessner

km12@informatik.uni-mannheim.de

Web Page: <http://ki.informatik.uni-mannheim.de/teaching/>

Forum: <http://ki.informatik.uni-mannheim.de/forum/>

Schedule

13.02. Knowledge Management I
20.02. Knowledge Management II
Part I Search and Discovery
27.02. Information Retrieval I
05.03. Information Retrieval II
12.03. Data Mining I
19.03. Data Mining II
Part II Knowledge Repositories
26.03. Information Extraction I

16.04 Information Extraction II
23.04. Knowledge Repositories
Part III Socialization and Collaboration
30.04. Web 2.0 and Enterprise 2.0
07.05. Social Network Analysis
Part IV Creativity and Problem Solving
14.05. e-Learning and Communities
21.05. Crowdsourcing