

COURSE DESCRIPTION – ACADEMIC YEAR 2015/2016

Course title	Seminars in Data and Knowledge Engineering
Course code	72124
Scientific sector	INF/01
Degree	Master in Computer Science (LM-18)
Semester	1
Year	2
Credits	4
Modular	No
Total lecturing hours	24
Total lab hours	--
Total exercise hours	12
Attendance	Required
Prerequisites	Students should have a solid foundation in computer science and be familiar with the basic concepts of databases and database management systems. These prerequisites are, for example, covered in the following courses: Analysis, Probability Theory and Statistics, Introduction to Databases, Data Management Systems, Data Structures and Algorithms.
Course page	http://www.inf.unibz.it/dis/~nutt/Teaching/DKE1516
Specific educational objectives	<p>The course belongs to the type "affini o integrative – formazione affine" in the curriculum "Data and Knowledge Engineering".</p> <p>The overall objective of this seminar is to study and discuss advanced technologies in database systems. The didactic objective of the course is to train students to critically read and study research papers. Students will also learn how to summarize the contents of a paper and how to present it in a seminar.</p>
Lecturer	Werner Nutt
Contact	Piazza Domenicani 3 , Room 2.09, nutt@inf.unibz.it , 0471-016126
Scientific sector of lecturer	INF/01
Teaching language	English
Office hours	During the lecture time span: by previous appointment, day of week and time will be determined at lecture start.
Lecturing Assistant (if any)	--
Contact LA	--
Office hours LA	--
List of topics	<ul style="list-style-type: none"> • Seminars on advanced topics in Data and Knowledge Engineering • Discussion of research papers in key areas of Data and Knowledge Engineering
Teaching format	The course is organized as a series of seminars, in which students present a scientific paper followed by a group discussion. In the first weeks students search for and select papers. The total number of papers assigned to each student may depend on the number of students, but will not be more than 1 or 2 papers. The lecturer will assist students in studying the papers, including the most relevant related work, and in preparing the presentation.

<p>Learning outcomes</p>	<p>Knowledge and understanding</p> <ul style="list-style-type: none"> • Thoroughly understand the scientific method of investigation. <p>Applying knowledge and understanding</p> <ul style="list-style-type: none"> • Be able to identify new application requirements and business opportunities in the field of systems based on data and knowledge. <p>Making judgments</p> <ul style="list-style-type: none"> • Be able to independently select the documentation required to keep abreast of the frequent technological innovations in the field by using a wide variety of documentary sources: books, web, magazines. • Be able to identify reasonable work goals and estimate the resources required to achieve the objectives. <p>Communication skills</p> <ul style="list-style-type: none"> • Be able to present in a fixed time the content of a scientific / technical report in front of an audience also composed of non-specialists. • Be able to structure and prepare scientific and technical documentation describing research publications. <p>Ability to learn</p> <ul style="list-style-type: none"> • Be able to autonomously extend the knowledge acquired during the study course by reading and understanding scientific and technical documentation. • Be able to independently keep up to date with developments in the most important areas of Computer Science.
<p>Assessment</p>	<p>The assessment of the course consists of two parts:</p> <ul style="list-style-type: none"> • Presentation of the paper(s) and active participation in the seminar (70%); • Final oral exam (30%).
<p>Assessment language</p>	<p>English</p>
<p>Evaluation criteria and criteria for awarding marks</p>	<p>Presentation of the paper(s) and active participation in the seminar (70%): this part of the assessment mainly covers the communication skills, during discussions the students can also show their ability to classify and judge research publications.</p> <p>Final oral exam (30%): the exam consists of questions on the topics presented in the seminars, in particular about the other papers. In this part, students mainly demonstrate their ability to learn by showing that they have internalized the topics discussed in the seminar.</p>
<p>Required readings</p>	<p>The reading list will be provided/decided on during the seminar.</p>
<p>Supplementary readings</p>	<p>--</p>
<p>Software used</p>	<p>--</p>