



COURSE PRESENTATION FORM – ACADEMIC YEAR 2010/2011

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| COURSE NAME | XML Data Management |
| COURSE CODE | 70229 (BSc and MSc 509) / 72022 (MSc 270) |
| LECTURER | Chris Mair |
| TEACHING ASSISTANTS | -- |
| TEACHING LANGUAGE | English |
| CREDIT POINTS | 4 |
| LECTURE HOURS | 24 |
| EXERCISE HOURS | 12 |
| TIME SPAN | 27.09.2010 - 21.01.2011 |
| TIME TABLE | See Timetable Page |
| OFFICE HOURS LECTURER | During the lecture time, each Tuesday, 19:00 after the exercise hour or by appointment via email, Faculty of CS, POS Building, piazza Domenicani 3 , office 2.10 |
| OFFICE HOURS TEACHING ASSISTANT | -- |
| PREREQUISITES | Students attending this course should be familiar with: <ul style="list-style-type: none">• introduction to programming• introduction to databases |
| OBJECTIVES | The objectives of this course is to provide students with a good overview of XML and the related technologies from the XML world, to teach knowledge about generating, parsing, processing and storing XML documents either programmatically or using standard tools with the overall goal of bringing the students in a position to know where, when and how to apply XML technology to real-world-problems; a few common XML based standards are also looked at. |
| SYLLABUS | <ul style="list-style-type: none">• Purpose and history of XML;• XML markup rules, well-formed XML documents;• Schemas: DTD, validation, other schemas;• Example: the OTA standard;• XML stylesheets – example: XHTML and CSS;• Parsing and generating XML documents programmatically – example: APIs available in Java;• XPath and Xpointer; |



- Transformation with XSLT;
- XML and relational databases – example: native XML support in PostgreSQL;
- Native XML databases – example: Exist.

TEACHING FORMAT

Frontal lectures, exercises in labs, assignments in teams.

ASSESSMENT

Written exam (100%).

READING LIST

- Lecture notes
- *Learning XML*, 2nd Edition By Erik T. Ray (Publisher: O'Reilly)

SOFTWARE USED

- Unix shell & command line tools
- Java development kit

LEARNING OUTCOME

After attending this course students have a good overview of XML and the related technologies from the XML world; they know how to generate, parse, process and store XML documents either programmatically or using standard tools; they know where, when and how to apply XML technology to real-world-problems .

COURSE PAGE

http://www.1006.org/training/20102011/xml_data_management_at_unibz/