

## SYLLABUS COURSE DESCRIPTION

<b>COURSE TITLE</b>	Internet and Mobile Services
<b>COURSE CODE</b>	75020
<b>SCIENTIFIC SECTOR</b>	INF/01
<b>DEGREE</b>	Bachelor in Computer Science and Engineering
<b>SEMESTER</b>	1st Semester
<b>YEAR</b>	3rd year
<b>CREDITS</b>	8
<b>TOTAL LECTURING HOURS</b>	48
<b>TOTAL LAB HOURS</b>	24
<b>PREREQUISITES</b>	Good knowledge of Java programming language, including principles of distributed computing, and of database management systems.
<b>COURSE PAGE</b>	<a href="https://ole.unibz.it/">https://ole.unibz.it/</a>
<b>SPECIFIC EDUCATIONAL OBJECTIVES</b>	<ul style="list-style-type: none"> <li>• Type of course: “caratterizzante” for L-31 and “affini o integrativi” for L-08</li> <li>• Scientific area: “discipline informatiche” for L-31 and “fomazione interdisciplinare” for L-8</li> </ul> <p>This course deals with the design and development of Internet and mobile systems providing practical knowledge required for designing and building applications. There will be illustrated principles for the design and the development of different kinds of applications.</p>
<b>LECTURER</b>	<a href="#">Markus Zanker</a> , office POS 2.20, Faculty of CS, POS Building, piazza Domenicani 3, <a href="mailto:mzanker@unibz.it">mzanker@unibz.it</a> , +39 0471 016977
<b>SCIENTIFIC SECTOR OF THE LECTURER</b>	INF/01
<b>TEACHING LANGUAGE</b>	English
<b>OFFICE HOURS</b>	Wednesday, 14-17 (please make prior arrangement by email)
<b>TEACHING ASSISTANT</b>	Markus Zanker
<b>OFFICE HOURS</b>	
<b>LIST OF TOPICS COVERED</b>	<ul style="list-style-type: none"> <li>• Basics of the Internet and the WWW</li> <li>• Web applications design</li> <li>• Tools and languages to develop web applications</li> <li>• Advance Java concepts for the web</li> <li>• AJAX, GWT, HTML5</li> <li>• PHP</li> <li>• Mobile application design</li> <li>• Usability guidelines</li> </ul>

<b>TEACHING FORMAT</b>	<ul style="list-style-type: none"> <li>• Lectures</li> <li>• Small exercises and regular assignments</li> <li>• Work in teams</li> </ul>
<b>LEARNING OUTCOMES</b>	<p><b>Knowledge and understanding</b></p> <ul style="list-style-type: none"> <li>• know in detail the foundations of mobile systems and services and the Internet as well as methods for their development;</li> <li>• know in detail the principles of computer networks and distributed systems;</li> </ul> <p><b>Applying knowledge and understanding</b></p> <ul style="list-style-type: none"> <li>• be able to develop Web and mobile applications;</li> <li>• be able to select and apply innovative technologies and methods that are appropriate for a given context and problem;</li> </ul> <p><b>Ability to make judgments</b></p> <ul style="list-style-type: none"> <li>• be able to take the responsibility for software development projects;</li> <li>• be able to work autonomously according to the own level of knowledge.</li> </ul> <p><b>Communication skills</b></p> <ul style="list-style-type: none"> <li>• Ability to explain a project activity or a scientific study, also to non-experts;</li> <li>• Ability to work in teams to implement software systems.</li> </ul> <p><b>Ability to learn</b></p> <ul style="list-style-type: none"> <li>• Ability to learn cutting edge IT technologies and their strengths and limitations;</li> <li>• Ability to follow and be up-to-date with the most important IT developments</li> </ul>
<b>ASSESSMENT</b>	<p>The assignments aim at ensuring a continuous interaction with the course content and will be assessed according to correctness and completeness. The project activity aims at assessing how students approach the development of an Internet and/or mobile system and how they interact with each other to achieve a common goal. The written exam assesses the acquisition and the understanding of the theoretical knowledge presented during lectures.</p>
<b>ASSESSMENT LANGUAGE</b>	English
<b>EVALUATION CRITERIA AND CRITERIA FOR AWARDING MARKS</b>	<p>Oral exam [50%], assignments [25%] and a project [25%].</p> <p>The project and the assignments are valid for the 3 regular exam sessions of the academic year.</p> <p>Assignments need to be submitted during the course of the semester, the project can be presented before the written exam of the first exam session or during one of the following 2 regular exam sessions.</p> <p>More details will be given during the lectures.</p>
<b>REQUIRED READINGS</b>	Lecture notes at the course page
<b>SUPPLEMENTARY READINGS</b>	<p>Suggested readings:</p> <ul style="list-style-type: none"> <li>• Marty Hall, Larry Brown, "Core Servlets and Javasever Pages: Core Technologies".</li> <li>• Marty Hall, Larry Brown, Yaakov Chaikin "Core Servlets and Javasever Pages: Advanced Technologies".</li> </ul>



**SOFTWARE USED**

- Java
- Eclipse
- Tomcat