COURSE DESCRIPTION – ACADEMIC YEAR 2018/2019

Course title	**Seminars in Software and IT Engineering**
Course code	72125
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	
Course page	https://ole.unibz.it/

Specific educational objectives	The course belongs to the type "affini o integrative – formazione affine" in the curriculum "Software Engineering and IT Management". The course provides a general overview of methods and practices in Software Engineering. It has the objective to enable students to understand principles of Software Engineering and apply these principles in their work as software engineers.

Lecturer	Ilenia Fronza
Contact	Piazza Domenicani 3, Room 1.08, ilenia.fronza@unibz.it
Scientific sector of lecturer	INF/01
Teaching language	English
Office hours	Arrange beforehand by email.
Lecturing Assistant (if any)	--
Contact LA	--
Office hours LA	--
List of topics	• Fundamentals of methodology for research in Software and IT Engineering • Discussion of research papers including key areas of Software and IT Engineering
Teaching format	The course is organized as hands-on activity in which students learn how to present scientific papers or textbook chapters on Software Engineering. The students will have to prepare a video seminar. The lecturer will assist students in studying the material and preparing the video. Students will then watch all the videos and discuss the material in a group.

Learning outcomes	Knowledge and understanding • Thoroughly understand the scientific method of investigation. Applying knowledge and understanding

	• Be able to understand and write documentation for technical, scientific reporting Making judgments • Be able to identify reasonable work goals and estimate the resources required to achieve the objectives • Be able to independently select the documentation required to keep abreast of the frequent technological innovations Communication skills • Be able to present the content of a scientific / technical report in front of an audience also composed of non-specialists • Be able to interact and collaborate with peers and experts in the realization of a project or research Learning skills • Be able to independently keep up to date with the developments in the most important areas of Computer Science • Be able to autonomously extend the knowledge acquired during the study course by reading and understanding scientific and technical documentation

Assessment	The assessment of the course consists of two parts: • a video seminar on a scientific paper or textbook chapter on Software Engineering; • oral exam after the lecture span on all videos prepared throughout the course.
Assessment language	English
Assessment typology	Monocratic
Evaluation criteria and criteria for awarding marks	• Video seminar and active participation in the course (70%). This component of the assessment covers mainly communication skills; in the discussions the students can also show their ability to classify and judge scientific publications. • Final oral exam (30%) consists of questions on all video seminars prepared throughout the course, in particular, on the presented papers and chapters. In this component, the students mainly demonstrate their ability to learn by showing their understanding of the different topics.

Required readings	• Schach, S. (2011) Object-oriented and classical software engineering (8th ed.) McGraw-Hill • Vliet, H. (2008) Software Engineering Principles and Practice (3rd ed.) Wiley • Salmre, I. (2005) Writing Mobile Code: Essential Software Engineering for Building Mobile Applications. Addison-Wesley
Supplementary readings	Additional readings will be communicated during the seminar.

Software used	--